

Considerations for the Older Athlete **Part 1**

Everyone who does any type of weight training is seeking greater strength to some degree. Strength enables you to handle heavier weights and larger workloads, which in turn makes you more proficient in any sport you choose. It results in a feeling of pride and accomplishment. To be able to say that you can bench-press 400 pounds or squat 500 elevates self-esteem.

The strength that you gain through countless hours of hard work and dedication is something you value and want to retain for as long as possible. When we're young or even in our 20s, 30s and early 40s, we're optimistic that we're going to be able to stay strong and perhaps even increase the numbers on certain lifts in the future. Unless something interrupts regular training, that's what happens.

For those who are genetically gifted, the ability to handle heavy weights seems ageless. Icons like John Grimek and Karl Norberg were able to remain impressively strong and healthy into their late 70s. In the end, of course, gifted and nongifted alike will come face-to-face with the hard reality that at some point they're not going to be able to lift as much as they did previously, no matter how determined they might be. Those who fight the inevitable get injured—no conjecture on my part but rather a basic fact of life.

As you grow older, your body goes through many changes, and none of them are good for someone attempting to maintain a high level of strength. Beginning at age 35, men start to lose muscle mass, typically about a pound a year. At the same time, unwanted bodyweight is easier to gain. Organ functions also diminish as you age, sometimes as early as your 20s. The number of fast-twitch fibers declines, while flexibility, balance and endurance also wane.

For men, the most important alteration in regard to gaining and retaining strength is by far the decrease of testosterone manufactured by the testes and adrenal cortex. It begins in their 40s and continues for the remainder of life. For many in their late 50s or early 60s, the hormone is severely lacking. The implication of that loss to anyone who's still trying to move heavy weights is obvious, or should be: that it's not going to happen,

Eh? Howzzat? Stay with me, gentlemen.

I'm very aware that individuals vary considerably in the amount of testosterone they produce at any age, but everyone eventually has less than he used to have in his system and will face the same problem as those who have had less for some time. Insufficient testosterone has other negative influences for anybody who wants to stay fit and look good. Ever wonder why the vast majority of older men have beer bellies even when they're not overweight? Testosterone decline. One of Mr. T's primary roles is to allocate fat to your legs, hips, glutes, back, chest and arms. When Mr. T ain't what he used to be, though, that same fat accumulates inside your lower abdomen, and absolutely nothing detracts from a fit appearance more than a potbelly. It's often referred to as "gray fat" and is extremely hard to get rid of.

So much for strike one. Strike two is the high incidence of osteoarthritis in the United States. If either of your parents had any type of osteoporosis, rheumatoid arthritis or some other

degeneration of their joints, then odds are you'll encounter it as well. Eighty-five percent of all people in the United States over the age of 70 suffer from degenerative arthritis, and most of them became symptomatic in their late 50s or early 60s.

Strike three: injury. No one, no matter how careful he's been, is immune from getting hurt. Over the years, injuries begin to add up. In most cases, they've occurred outside the weight room, perhaps on a sports field. More often than not, they're the result of an accident. Take my case: Two areas of my body that I have to constantly be aware of when I'm training are my left shoulder, which I dislocated 25 years ago in a fall, and my left ankle, which I blew out when I and my Trans Am did battle with a high-line pole. Over time I've dinged or outright injured every joint and muscle in my body at least once. I'm not in the least bit unique in that regard. All of my friends of a certain age have similar tales to tell about their injuries. It's par for the course when you train heavy and for a long time. In addition, a great many older athletes have had some sort of surgery, usually dealing with a joint, at some point in life. All of those factors must be in the mix for you when you're setting up your training program.

Problem is, even when all the signs and portents are saying that it's time to stop lifting heavy and shift to a more sensible routine, there are some who refuse to do so. They're convinced that they can continue to be the strongest bencher, squatter or deadlifter in town. They start using strength-enhancing pharmaceuticals, usually in large doses, in hopes of retaining or improving strength. Not only is that risky to overall health, but it seldom works: Once the joints begin to degenerate, no drug on the market can replace lost bone and cartilage.

Same holds true for nutritional supplements. I do think that glucosamine and chondroitin can help keep joints stronger, but they must be taken—in ample dosages—long before any disintegration occurs. If you're already having severe joint pain, save your money.

There are other routes. Some trainees gulp pain pills before, during and after training, determined to keep lifting at a respectable level. Well, that's a dead-end street. No kidding—you could lock yourself in an abused, poorly operating body for the remainder of your life.

Then there are those who simply can't deal with handling lighter weights and quit training altogether. They can't make the mind shift to appreciating the benefits of just looking and feeling healthy.

Happily, there are those who recognize that it's foolish to stay on a path that's causing so much pain and discouragement. They make the switch to a more sensible training regime. They're more than willing to trade big numbers for a fit, healthy body that enables them to enjoy such simple pleasures as taking a long hike, swimming in an ocean or riding a bike through a state park.

Okay—it's a difficult transition. It certainly was for me and everybody I know who made a mark in competitive lifting, particularly in either Olympic lifting or powerlifting. What they accomplished on the platform was joined to their self-image and therefore self-esteem. So when they began to lose that hard-earned strength, they felt less proud of themselves. That kind of perception isn't limited to world-class athletes. Think about the lifter who managed to place only

in state or local contests and who just can't seem to curtail heavy training in favor of a more commonsense approach. The trophy, medal or having his name printed in some magazine are tangible evidence of his worth. Result? He continues to train hard and heavy, even if that means (in the almost words of the song) painful days and sleepless nights.

Bodybuilders, on the other hand, can make the switch from heavy weights to lighter ones much more readily. So they use higher reps—so what? They're maintaining a fit appearance if they keep to the routine, and having a fit look—as opposed to striving to lift big numbers—has always been their primary goal. Getting stronger was a nice by-product of training but was never as important as developing a prize-winning physique. Also, whereas competitive weightlifters rarely did more than 10 reps on any exercise and as a rule hated high-rep movements, bodybuilders by and large (yes, really) used some type of light-weight, high-rep program some time during a year to prepare for a contest. They knew the drill.

I'm frequently asked if there is a specific time line for switching from a low-rep, heavy-weight to a higher-rep, lighter-weight routine. No, because individuals differ greatly. Some, like Grimek and Norberg, are genetically blessed and can lift heavy into their golden years. I've known several on the local level who never entered a contest but managed to handle massive workloads into their 70s. By contrast, I've also known ambitious physique contestants and lifters who were forced to stop heavy training before they reached 50.

Which raises the question, "How will I know?" I reply, "You'll know when it's time to make changes in your training schedule." That may not be a full-blown epiphany, but it's close. You'll wake up one morning and realize that the course you've been following for the past few years is doing more harm than good. You no longer look forward to going to the gym. In fact, you dread the idea because it means more pain—and not the good kind—from exertion. Not infrequently, you're also facing some health issue: accident, serious illness, injury or surgical procedure.

Uh-oh. You're ready to toss the magazine across the room, right? Well, stay loose. It's important to note that, initially, you may have to make adjustments only in a couple of areas, not your entire body. Let's say your back and legs can handle the low reps without any problem but your upper body can't. Adjust your routine accordingly. It's possible that the exercises in your routine—not the sets and reps—are the culprits. Of all the shoulder-girdle exercises, the bench press is the most troublesome yet the one movement that most trainees refuse to give up. Two choices. One, drop the lift entirely for several months, then see if you can do it without damaging consequences. Two, go to high reps and light weights and, again, determine whether the movement itself is causing the pain.

I'm assuming, of course, that you're willing to take a giant leap for mankind and forget your old numbers. There's no question that turning the page on the training log and personal bests is the hardest part for anybody who's forced to switch from heavy lifting to lighter poundage—even if maintaining strength and fitness is the trade-off. Still, you must do it.

Older strength athletes and former Olympic lifters who did lots of high-skill exercises when they were younger often attempt to keep a few of those moves in their routines. It's not a good idea: Explosive movements put a huge burden on the joints. Static exercises are less stressful, and as

you get older, there's really no reason to include quick lifts in your program. They're great for young athletes who participate in Olympic competitions or engage in contact sports, but I doubt whether many 50- or 60-year-old men do blocking and tackling that's not related to a salmon run or trout stream. So replace power cleans, power snatches, jerks, high pulls and shrugs with deadlifts, bent-over rows and overhead presses.

While you're at it, avoid exercises that cause pain, whether during or after your workout. Even seemingly innocent movements can be trouble—and yes, I do mean curls, front and lateral raises and triceps kickbacks. Lots of times, if you take a layoff from doing an exercise that hurts, you might be able to add it back later if you use less resistance and lower reps than before.

The problems facing an older athlete who wants to stay physically fit may seem insurmountable, since just about everything I've mentioned so far reads like an introduction to a Dickens novel. It isn't. Despite the handicaps and restrictions the older body faces, it can still be altered in a positive manner. The deck may be stacked against athletes of a certain age, but they know how to do a vast array of exercises correctly and have learned how to pay closer attention to the signals coming from their bodies because of their exercise. Perhaps the most beneficial attribute an older athlete possesses is patience. Tell your average athletes that it will take them a year to achieve a certain level of strength, and they'll have a fit. They want it now or at least soon, not later. To an older athlete, though, a year is no more than a few heartbeats. As long as he's moving closer to a goal, he's content.

Younger athletes can benefit from using heavy weights for lower reps, but older ones can't, for the many reasons we've seen. Higher reps with lighter resistance, however, fit the needs of men who are in their late 50s—and in some cases, before the 50s kick in. That approach to strength training works because it enables you to improve and maintain the integrity of your joints without stressing them in any great degree. The higher reps, which involve the tendons and ligaments, primarily act on the muscles. Yet they deliver much more blood than lower reps, which nourishes and strengthens the cartilage. So you can have your cake and eat it too, reducing the wear and tear on your aging joints while building muscle. Apply yourself diligently to such a routine, and you'll be able to create an attractive and functional physique.

By any stretch of the imagination, that's not a new idea. Many of the old-time strongmen deployed it—can you say Jack LaLanne? Now in his 90s and as robust and active as a 20-year-old, he's long been the spokesman for the multiple sets and reps of low-impact conditioning. He's never had any joint problems simply because he never abused his joints. Rather, he maintained their health.

So now you're asking if that's really strength training. I believe it is. The low-rep, heavy-weight system is geared for developing peak strength, the ability to move heavy resistance for one rep. The high-rep routine, by contrast, builds the horizontal strength, or endurance, that's lacking in older people as a rule. It can, however, be reclaimed if the spirit is willing. It's certainly of great value to any older athlete and, in some instances, for a younger one as well.

I didn't find out that this mode of training could be elevated to such a high level until I trained with Jack LaLanne. I'd been hired by his company to market a home-fitness product, a compact

set of pulleys that attached to a wall. He had one installed at his house, and I went there so he could show me how to use it.

Just retired from Olympic lifting, I was still training heavy, benching and squatting 400 for 10 reps. Like everybody else, I was aware of his legendary feats of endurance, but I (wasn't I the one, though?) had been running and playing a great deal of volleyball on the beaches of Santa Monica and figured I was up to the task. Besides, I was 25 years younger than Jack.

What I didn't know was that he loved going head to head with weightlifters. I was grist for his mill.

The first exercise he wanted me to do was a combination of curls and triceps pushdowns in super, super-set fashion—15 reps of curls immediately followed by the same number of pushdowns, then another set of curls, with no rest whatever between sets. Since the apparatus had stacks, I have no idea how much actual weight was used, but it wasn't that heavy. He demonstrated the technique, then told me to do as many sets as I could without stopping. Breathing like an asthmatic from the unaccustomed high reps, I managed to complete five sets of both exercises before my muscles locked up.

Jack's turn. With ease he quickly knocked out 15 sets and didn't even break a sweat. He could have done twice that if he'd wanted to. The rest of the workout—he definitely made his point—was more of the same.

I left with a tremendous appreciation for Jack's type of strength and have utilized the concept on several occasions when I've found myself with only light weights to use for training. The high-rep approach is ideal for the older body, as it takes the burden off the susceptible joints and builds functional strength that can be used in everyday life.

Just because the natural process of growing older prevents you from handling the numbers you once did doesn't mean that you have to get progressively weaker. It's very reassuring to realize that you have a great deal of control over how you look and feel. Death is inevitable, but becoming fat, feeble and inactive beforehand is not.

Next month I'll go into the specifics of putting together a high-rep, light-weight program. We'll also look at cardiovascular, respiratory fitness and improving flexibility and balance.

Part 2

Last month I noted the many difficulties facing older athletes who are trying their best to retain a certain level of strength fitness: the loss of muscle mass, flexibility, balance and endurance, as well as the decreasing amount of testosterone from age 40 on and the wide assortment of degenerative joint diseases. Then there are all those injuries, big and small, that add up over the years.

The negatives make it harder for people in their 50s, 60s and 70s to achieve the goal of remaining active and fit. Yet it can be done and is being done by countless older athletes.

Those who have spent a large part of their lives participating in sports and some form of weight training understand better than their younger counterparts how their bodies respond to exercise. There is nothing quite like experience in that regard. Older athletes know how to do a wide array of exercises and know how to do them correctly. That's a huge plus. They also understand their limitations: how much workload they can handle without becoming overtrained, which exercises they need to avoid and which ones provide positive results. That knowledge is invaluable in that it helps older athletes avoid bothersome injuries. While injuries are a part of strength training and bodybuilding, you can reduce them to minor dings by paying close attention to the signals your body is sending to your brain and being wise enough to make the necessary adjustments right away.

There's no question that it's much harder for older athletes to hold or gain strength, even improve their physiques, but it can be done if they do it right. An older individual has to be absolutely dedicated to the task at hand. Dedication equals consistency, which is critical to success. When you decide on a training program, you have to follow it religiously, or the results won't come as expected. Most older athletes are either retired or semiretired and so have control over their daily schedules. There should be no excuses for missing a workout. Sure, I realize that there are legitimate reasons for skipping a session, but that should happen only a few times a year, not every other week.

Whether you're young or old, once you embrace the notion that you must be consistent with your training, you're well on your way to reaching your goal. A missed workout is much more detrimental to an older body, however, than it is to a younger one—and for the same reasons an older body takes longer to recover and is slower to heal. So that's the first step—to vow never to skip a workout unless it's a matter of life and death (or an awful lot of money is involved).

Consistent training has to become an essential part of your life. It's not a seasonal activity but a year-round commitment. So you must put together a fitness regimen that suits your personality. If you don't enjoy what you're doing, you aren't going to stick with it. By the same token, you must set sensible, realistic goals. I discourage older athletes from setting high numbers as a goal on some lift—usually the bench. Even if you reach that kind of goal, overall health and well-being are usually diminished.

As I've mentioned before, the hardest part of learning how to train as we grow older is to forget the old numbers. Forget what it felt like to be the strongest lifter in the gym or the strongest

squatter or deadlifter. To stay with that mind-set is an invitation to trouble. Sure, it's fun to recall the days when you tossed around incredible poundages, but that's history. Don't attach your ego to how much you once lifted or how many awards you won in the past. It's a dead-end street.

When designing your fitness program, you need to think of overall health—feeling and looking good, being able to perform the many necessary physical tasks of everyday life, staying strong enough to remain independent. Being able to take complete responsibility for all facets of your life without assistance is a blessing all older athletes appreciate, but it can happen only if you train diligently. The good news: Each of us has a great deal of control over the situation. We decide what to eat and drink and how to exercise. That's a fine feeling, in my opinion, and I wouldn't trade it for a 400-pound bench—maybe 440, but not a measly 400.

Determining when you should stop trying to move heavy weights and shift to a routine that calls for lighter poundages and higher reps is an individual matter. Some feel the need in their mid-to-late 40s, while others are able to lift heavy for another 10 to 15 years. As long as you can deal with heavy and hard sessions, stick with it. I was nearly 60 before I made the transition, and many even older than I am continue to train heavy without suffering any dire consequences.

Besides, as I pointed out last month, you may graduate to a higher-rep routine anyway, one bodypart at a time. The low reps may be working just fine for your lower body and back, but your upper body can no longer handle the stress. So you do high reps for your upper body and stay with low reps for the other two major groups. Eventually you'll end up working all areas for higher reps. That may happen over the course of several years, but in the meantime you will have learned a great deal about how to incorporate the changes into your overall program.

Understanding that it's really necessary to stop abusing your joints with heavy weights and changing to a less stressful workout is one of the most difficult decisions for almost all strength athletes. They totally hate the idea of training with light resistance when they were once capable of some impressive lifts. Their big numbers are inevitably linked to self-esteem, and not being able to do them causes a great many to quit training altogether—a huge mistake that can open the gate to serious health problems. Those who cease all training also stop eating right and taking nutritional supplements. Rest is adversely affected, and pretty soon they're ashamed to be seen in a bathing suit.

Those who put their egos in check and embark on a higher-rep philosophy, however, can continue to stay relatively strong and maintain a healthful, vibrant lifestyle—and look good in a swimsuit.

There's no reason you can't use a high-rep routine at any age. Many who try it really enjoy that type of training. They recover more readily and notice that there's less discomfort during their workouts. In the process, they find that they're improving their endurance. It's particularly beneficial to those who take part in an endurance activity like long-distance hiking or skiing. Nearly all bodybuilders I knew used the high-rep concept at some time during a year. They'd do pure strength training for a few months and then in preparation for a contest switch to a high-rep program to trim down and sculpt various muscles. That's also why it's easier for bodybuilders to

convert to the lighter weights. They understand the value of the system because they've used it previously.

Don't forget the indomitable Jack LaLanne. He's always done a high-rep routine, and the benefits are obvious. In his 90s, he's still as active and vibrant as a 29-year-old. If for no other reason, a high-rep program will give your weary joints a well-deserved rest and give you the opportunity to see how it affects you in other ways.

Basically, when it's time for you to make the change, you'll know. Low reps using heavy weight is the ideal formula for younger athletes since they force the attachments to be more involved. The lower reps improve the integrity of the joints and help make them more secure. All is well so long as the testosterone is pumping through your system in great amounts and there are no signs of arthritis. As we age, though, things change, and we have to adapt to those changes. Otherwise, workouts will become not times of joy but times of discouragement.

Even if you have low testosterone, a host of old injuries and one or more joints that can't handle the stress and pounding of heavy training, you can still control how you look and feel by using a high-rep, lighter-weight routine. That's because the light weights don't involve the attachments the way the heavier poundages do, yet they do help strengthen the stability of the joints by flushing blood and nutrients through the muscles into the cartilage. That means you can work exercises diligently because the muscles are responsible for handling the bulk of the work. In fact, the muscles receive much more attention in the high-rep system simply because they're called upon to work longer than they have to with lower reps.

Which raises the question of how many reps are considered high. The answer varies, depending on the equipment you have available. Should you belong to a gym that has a wide array of machines and free weights, you might want to stay with a specific number of reps on all of your exercises. I generally use three sets of 20 as a guideline when starting someone on that type of program. When the sets get easier, you can add resistance.

A great many older athletes, however, train at home and have a limited supply of bars, plates and dumbbells to select from and no machines at all. So they have to run the reps way, way up on certain movements. For example, calf raises done with only bodyweight have to move into the 100-plus range to be beneficial. Perhaps you only have a set of 20-pound dumbbells at your disposal and include various types of curls, triceps exercises and front and lateral raises as well as one-arm rows in your weekly program. You'll need to push the reps higher until you find the range where more reps aren't helping but creating problems in the form of joint aches and pains. Even though you're handling light weights only, be advised that if you run the workload up too high too soon, you'll overtrain a joint or muscle that's part of the exercise. Even a tame movement like pushups can overwork elbows, wrists or shoulders.

So you must proceed slowly. Be conservative and stay with the same number of reps for several weeks before pushing higher. Most important, pay close attention to the signals coming from your body. In their younger years all who gain any degree of success in competitive weightlifting, bodybuilding and strength training learn how to push through the pain in order to reach that higher level. They can get away with that attitude because their young, developing

bodies are supplying all the hormones and enzymes they need to help them recover. It's a mistake, though, for older athletes to have a "push through the pain" mentality. The healing nutrients aren't in abundance anymore, and the only thing you'll achieve by forcing through to a higher rep count is a ding.

I need to note that even if you do overextend and aggravate a muscle, joint or—more likely—an older injury, the ding won't be nearly as severe as it would have been if you'd been using heavy weights. Rest, ice and mild movement are usually sufficient to getting the ding cleared up in a matter of days—another good reason to do higher reps.

Older athletes are more attuned to their bodies than younger ones. They ought to be, as they've been working out longer. That's a big plus. When you get the signal that you need to stop, stop. Don't push on just because you set out to do X number of reps. Adaptability is a key attribute for the older athlete. If a certain exercise is causing you trouble, drop it from your program for a week or a month. Then, see if you can do it again without experiencing any pain. You may have to eliminate it completely—which isn't that bad, as there are lots of exercises to choose from. There's no reason to stick with an exercise that's obviously doing more harm than good.

It's also critical for older athletes to pay attention to how they feel the day after a workout or even two days after, as that's when the signs of overwork often show up. This morning I found that I had a new ache in my upper midback. Why? I hadn't done any direct work for that area yesterday. I did, however, throw in extra work two days ago. Having discovered the source of my problem, I was now in a position to make adjustments so it wouldn't happen again, at least not right away. Possessing a competitive nature, I'm certain to do something stupid again in the not-so-distant future.

I'm not alone. My former Olympic lifting friends all tell me similar stories. We have to learn to temper that drive, using it to make steady improvement within our limitations while at the same time holding the monster back so we don't do too much. It's a rather thin line, and what's even more frustrating, it's constantly changing. What was working nicely only a few months ago is suddenly detrimental. I've decided that it's nothing personal but simply the way nature works. Some people curse the constant alterations, yet I find them challenging. Take an exercise away from me, and I'll dig around until I've found another. Quite often the substitute exercise is more productive than the one I left behind.

When the time comes to switch to a high-rep routine, you're most likely training three days a week. Now you need to train more often. Why? Even though you may be spent after putting in an hour-plus session with lighter weights, it still isn't as demanding as a low-rep workout. That's because the intensity is much lower, which means your attachments weren't as involved in the various exercises, and tendons and ligaments take much longer to recover than muscles. Since the higher-rep sessions help you recover faster and the overall workload is much lower, you need to put in more time with the weights if you really want to improve your strength and physique.

You'll find that you can handle five or six days rather easily once you get into the flow of things. That affords you the opportunity to build a great deal of variety into your weekly program—a genuine plus as you'll have time to hit bodyparts that you usually neglect. A few contend that

they'd much rather train for a couple of hours three days a week than stretch that out over six days. That doesn't work. I wish it did, but if you're putting your full effort into every exercise, after an hour or an hour and 15 minutes you're not going to derive much benefit from anything else you do.

The older body can't handle a huge single-day workload but is more than capable of being trained moderately every day. And why not? Your health and fitness should be your primary concern. What's more important? If you're still chasing the almighty dollar, you've got serious problems. What would you be doing on those off days? Most likely nothing physical, and that's what should be happening. Thomas Jefferson wrote, "Give about two hours every day to exercise, for health must not be sacrificed to learning. A strong body makes a strong mind." I might add that health shouldn't be sacrificed for any reason. Now you may be thinking, didn't Tom say two hours a day? Yes, he did, and in addition to your lifting program you should be doing another hour of some other kind of physical activity—flexibility exercises and some form of aerobics, for example. I'll talk about that in next month's installment of this series.

People who start a high-rep program think the workouts are going to be a great deal easier than the ones they used to do using heavy weights. Not true. In order for the routine to be useful, you have to push yourself. The final reps on every set should be demanding, and if you're not tired when you finish, you need to increase your effort. On any exercise where I use ultrahigh reps, I'm blowing as if I've run a fast mile when I finish. That's good. I want to involve my cardiovascular-respiratory system as much as possible.

You should be just a teeny bit sore the day after a workout—not aching sore but enough that you know the work you did hit the mark. Learn to be adaptive. For example, if you know that when you use a barbell for steep incline presses your bad shoulder is stressed far too much, try using dumbbells. If regular squats hurt, see if you can do lunges or perhaps squat with a wide or narrow stance. Avoid explosive movements. You don't need them; static lifts will enable you to get strong without irritating your joints.

Most of what I'm saying is no more than common sense. Pay attention to what your body is telling you, and you'll be fine. I encourage older athletes to train at home, which gives them a great deal of freedom in scheduling their workouts. You don't need much in the way of equipment: barbell, plates, dumbbells, situp station and a bench. You don't even need a squat rack because you're not going to be using really heavy weights. Just clean the bar, flip it over your head, and fix it across your back. Of course, if you have a rack, that's even better, but it's not critical to what you're trying to accomplish. At home you can work at your own pace and not have to wait for some piece of equipment to become available. You can try some new exercises and not have to be concerned if you make a fool of yourself. And since you have to provide your own motivation, you can be consistent with your training.

Weight work is just a part of the total picture when it comes to training an older body. Aerobic fitness, flexibility and balance are also vital—not forgetting weight control, diet and supplementation. I'll cover them next time.

Part 3

I want to cover aspects of keeping the older body strong, fit and healthy that I didn't elaborate on in previous installments of this series. First, a recap: Older athletes should train with lighter weights and use higher reps so as not to strain their joints the way heavy poundages and lower reps do. Older joints, for a great many reasons, can't handle the stress of being pounded repeatedly with heavy resistance. Using lighter weights and higher reps makes a lot more sense. The movements flush nourishing blood to the joints and strengthen the cartilage, which is primarily responsible for the articulation of the joints. That's a good thing—strengthening the joints without stressing them. In addition, the higher reps work the muscles very directly. It's a two-for-one deal—enhancing muscle and cartilage strength while avoiding a great deal of involvement with the attachments. Tendons and ligaments, of course, play a role in any exercise, but with the higher reps, it's a minor role.

While the overall workload for a high-rep workout may be close, or even equal, to that achieved with heavy weights and low reps, the intensity is going to be much, much less. That has two implications. One, it's easier to recover, and two, you'll need to train more frequently. Unless you can still handle heavy weights without any problem, three days a week isn't going to be enough to help you gain, or maintain, a high level of overall strength fitness. With the high-rep routine you need to train five or six days a week in order to work your muscles sufficiently.

Many balk at that idea. It takes up too much time, they say. Okay—take time from doing what? What could possibly be more important to an older person than good health? The answer—nothing. Certainly not money. If you aren't able to stay healthy, all your loot is going to gush down the drain in a hurry. Not family either, a typical excuse. You're not going to be any help to your family or be able to share moments with them if you don't take care of your health.

What I'm talking about is dedicating two hours a day to the physical shell you reside in. In the overall scheme of things, that's a drop in the bucket. An hour and a quarter training with weights, 45 minutes doing cardio and a small amount of time trying to improve flexibility and balance. Okay, I realize that adds up to more than two hours—but not by much because on some days you can complete the weight work in less than an hour and a quarter. Don't evade my point: As you grow older, you have to allot a certain amount of time for your physical self.

Some argue that they'd much prefer to train for a longer period and stick with three workouts a week, rather than expanding to five or six. Granted, there are some who can get away with that approach, but most older athletes can't. I said that a high-rep routine is easier to recover from than a low-rep one, yet if the workout lasts for two hours plus, that's no longer true. The workload for a long session is often double what you take on in a shorter one, and few can recover properly from it. Mostly that's because older athletes are lacking in that critical recovery hormone, testosterone. More on that later.

Also keep in mind that it takes longer to complete a high-rep set than one done with lower reps. A set of five reps can be knocked out in half a minute or less, while a set of 125 may take seven or eight minutes. I know because I timed how long it took me to do 125 reps on a flat bench

using an Olympic bar. The two sets that day used up 20 percent of my training time—more, actually, as I had to take a break to bring my pulse rate down between sets.

That means you need to restrict the number of exercises in your daily program—no more than five total, not counting warmup movements. Three for the major groups and a couple for the smaller ones. Even when you move quickly from one exercise to another, you still won't be able to squeeze in more. Nor do you have to try: You have five or six days to spread out the workload.

Since you should give every muscle group some attention during the week, three sessions aren't going to feed the bulldog. I like six days of training. That way you can hit all the large muscles at every workout from slightly different angles. For example, you can work your shoulder girdle six times a week by alternating flat benches, inclines and overhead presses every third day. Change the set-and-rep formula if you want some variety. The same idea goes for the back: deadlifts, bent-over rows and shrugs.

You might recall that I discourage older athletes from doing any explosive exercises, such as power cleans, power snatches, high pulls, shrugs or jerks. I think shrugging is beneficial, but athletes of a certain age need to shrug in a relatively slow, static fashion. No other exercise involves the traps to such a degree, and having strong traps is extremely important to maintaining a strong back.

You can work your legs completely with just two exercises: back squats and lunges. While I really like front squats for younger athletes, they don't fit into an older athlete's routine. Few older athletes are flexible enough to be able to rack the bar across their front deltoids correctly. That's fine; just work the other two movements diligently, and you'll obtain the desired results.

Also be aware that every exercise needs to be done deliberately—and not just the big-muscle movements. I've watched men jerk a light dumbbell up and down in a motion vaguely similar to a curl for more than 100 reps, then complain of extremely sore elbows. Well...duh. As usual, the biggest culprit is the bench press. Just because people are using a relatively light weight, they figure they can rebound the bar and press it in any upward direction they choose as long as they do x number of reps. Very, very wrong.

Using improper form with heavy poundages usually makes for a failed rep. Not so with light weights. Instead, the sloppy technique is incessantly repeated, sometimes for the entire set. It will eventually take a toll on the offended joint or joints.

Those starting in on a high-rep routine generally assume that it's going to be much easier than one involving low reps, and in some ways it is. In other ways, however, it's more difficult. The hardest part of doing a high-rep workout is having to concentrate on each and every rep from beginning to finish, and on really high-rep exercises that can go on for five minutes or more. It's quite easy in the midst of one of them to let your mind wander.

High-rep workouts are very similar to the kind of work you have to do in a rehab program. Every rep needs to be performed precisely—no rebounding the bar off your chest on a flat or incline

bench. Rather, you should pause at the bottom of each rep. The same holds true for squats, deadlifts, bent-over rows, lunges and all the auxiliary exercises. Any exercise, however harmless it may seem, can cause trouble if you repeatedly employ faulty technique. An exercise can also be a problem when overworked to the extreme. Case in point: the old stand-by, pushups. Jam up and down too fast or push the reps up too rapidly, and your shoulders, elbows or wrists are going to signal you to make some changes.

It takes time for your body and mind to adjust to a different type of training. There's really no need to rush. You're not qualifying for the Olympic trials. Start conservatively, learn what you can and cannot do, and center all of your attention on every set. Make haste slowly is a good motto. Don't try to go balls out from the very beginning. If you feel that you can do 50 reps on some exercise, start with 30 or 35 and slowly move up. Think more about form than numbers. Add reps deliberately and only a few at a time. A 72-year-old pen pal of mine started out doing 10 pushups every other day as part of his six-day-a-week program. He added one rep every other week, and the last time he wrote, he was up to 65 reps.

Include at least one core exercise for the three major groups—back, hips and legs, shoulder girdle—at every workout, along with a couple of movements for the smaller groups—biceps, triceps, calves and deltoids. I like working in a circuit for several reasons. It creates a more balanced development. I can get more done in a shorter period of time, and it improves cardiovascular fitness while strengthening the body. In fact, I can run my pulse rate up much higher moving through a fast circuit than I can while walking. I simply can't walk that fast, nor can anyone else I know. I don't want to run, by the way, as the pounding isn't going to sit well with my ankles and knees.

In cold weather, however, I often do certain exercises back to back rather than as part of a circuit because the working muscles stay warmer. Example: the deadlift. I previously mentioned that I no longer use the heavy, light and medium system for high-rep training the way I did when I was using lower reps. Rather, I follow a difficult workout with one that's just a bit less demanding, then another that's tougher and then back to one that's not as hard. The slight change does wonders for the weekly routine. If I stack too many demanding days on top of one another, I start dreading having to train. That I do not want. I want to look forward to my weight sessions. I don't want to be thinking, "I have to train today," but, "I get to train today." To me, training is a privilege, a blessing that gives me a great deal of control over how I look and feel. Being fit gives me freedom to move about and enjoy life. Not being able to do so isn't a pleasant thought.

I also vary difficult weeks with lighter ones, not on a regular basis but whenever I feel the need to do a bit less for whatever reason. While I don't normally use a light day in my weekly routine, I have one ready for days when I know I'm on the brink of overtraining. It may be just a certain area that requires a break, yet I pull back on everything for that day to make sure. Those days usually come along every three or four weeks, usually on Wednesdays. At those workouts I spend 45 minutes concentrating on abs and lumbar. Instead of leg raises and situps, I do crunches and reverse crunches for 10 minutes without a break. I also do hyperextensions or good mornings and reverse hyps. Then I finish off with multiple sets on the wheel.

The change from my normal routine always pays dividends. My lower back and abs get nice and sore, and when I resume my regular exercises, they're fresher, and I can handle more workload. While you may never need such a break, it's good to have one in your repertoire just in case.

Besides the primary exercises, you should work your abs and lumbers at every session. Perhaps leg raises and hypers prior to working out with weights, then situps and reverse hypers at the end. It's absolutely critical that you maintain a strong core, regardless of whether you're using heavy or light weights. The exercises for those groups get them nicely warmed up at the start of the session and serve as cooldown movements at the conclusion.

I suggest that anyone starting in on a higher-rep routine do three sets of 20. How you proceed from there depends on what equipment you have available and your personal disposition. Some like to stay with a set amount of weight and run the reps up. Others prefer to keep the reps fairly constant and increase the resistance. Yet others find their sessions more productive if they mix and match the two ideas. Perhaps deadlifts with heavier weights and a constant number of reps and flat-bench presses with the same poundage at every workout and the reps being continually pushed higher and higher. I recommend trying both approaches and then determining which fits your needs. It's really not that important how you set up your overall program, as long as you do it consistently and with determination.

It's critical that you stay flexible about what you do on a given day. You should have a definite idea of what you're planning on doing that day, yet if things go south, be ready to make adjustments. Let's say that you plan to do 75 reps for three sets on the squat. The first set goes smoothly, but when you reach 50 on the second set, you get a sharp pain radiating from your left knee. Stop. Don't push through the pain. Rest; then try again. If it happens again, leave the squat alone, ice the knee, give it an extra day of rest. Then, when you do squat again, lower the reps to 50. No matter how careful you are about selecting poundages and adhering to perfect form, there are going to be setbacks. Learn to recognize them and go with the flow.

Now I want to address three other aspects that are necessary for overall fitness: cardio, flexibility and balance. Your capacity for them wanes with age, but they should be incorporated into your program in some manner if you want to live an active lifestyle.

Cardio first. I realize that the vast majority of older athletes who love to lift weights absolutely hate the notion of doing any form of cardio. Yet without healthy circulatory and respiratory systems you're not going to be strong and certainly not fit. Cardio is complicated only if you make it so. Its simplest form—aerobics—is walking, which you can do anywhere and at any time during the day. You don't have to power-walk unless you want to, and the results, according to experts, are equal to running. Of course, you may enjoy some other form of cardio—swimming, hiking, dancing or working out while watching a video of one of the countless quick-fix programs being marketed on television.

Find something that's pleasurable. Otherwise you're not going to do it on a regular basis, and it's crucial that you do it every day. It took me a while to get into walking after running for 20 years, but now I look forward to my daily constitutional. While I lift six days a week, I walk seven,

unless the weather is nasty. (President Harry Truman said that walking was the only exercise a person needed to stay fit.)

Start off doing 20 minutes and proceed from there to 45 minutes to an hour. You can walk before you train or after, or both. More is better when it comes to walking. Not only is it beneficial to all your internal systems, but it also helps with weight control, which is often a big problem for older athletes. Also, you don't have to walk or do any other form of cardio in close proximity to your weight work. Walking early in the morning or in the evening may appeal to you. You feel stronger in midafternoon, however; that's when you lift. It's how much work you do throughout the day that counts. Just make sure that the cardio activity you select is low impact. Otherwise you may end up doing more harm than good.

Over the years everyone, athlete or not, loses flexibility in the shoulders, backs, hips and legs. Why that happens varies: arthritis, old injuries and not doing anything to maintain a complete range of motion. Unfortunately, you're never going to regain the same degree of flexibility in your joints as you had when you were younger, but you can improve it. The key point here is, easy does it. Older joints are extremely susceptible to injury, so you never want to force any stretching move. In addition, individuals vary greatly as to their potential ability for developing a complete range of motion. Besides, you're not going to be competing in a Greco-Roman wrestling match or getting ready for a hot date with a contortionist. You just want flexibility sufficient for simple tasks—gardening, picking up objects from the floor, reaching up in a cabinet for a box of cereal.

I call these moves activity-specific training: preparing your body for whatever you plan to do that coming week. You need to make certain you're flexible enough to perform ordinary tasks without hurting a joint. You don't have to approach it as a strict discipline. Yoga postures are good. Pick out a few, or a lot, that fit your needs, and practice them regularly. If your hobby of choice is golf or bowling, do stretches that enable you to enjoy those sports free from worry that you might ding a joint.

Here's how I work flexibility training into my daily fitness routine. About six hours after I've trained, I take a couple of magnesium-calcium tablets to help me relax as I prepare to go to bed. Then, while watching "Seinfeld" reruns, I slowly twist and stretch in all sorts of directions, seeking out tight joints and muscles. I move like the old Chinese men who practice the ancient martial arts, but I'm not attempting to follow any definite system. I'm only looking for tight areas. When I find them, I move around until I feel them relax. It takes only about 15 minutes and really helps.

Balance is another attribute that diminishes with age—again, because it isn't used nearly as frequently as it is in youth. For those who want to remain active, though, it's critical to maintain a certain standard of balance. Several months ago I read in the AARP magazine that men and women lose their ability to balance themselves rapidly after age 50. By the time they reach 70, they can stand on one leg for an average of only seven seconds. As I'd participated in nearly every sport imaginable and had done well in some that required a high degree of balance, I was confident that I could exceed that average by a large margin. To my consternation I managed to

balance on my left leg for only eight seconds and my right only seven. I tried several more times, and the results were basically the same.

Then and there I vowed to change that and started practicing the skill, usually at the same time of night when I did my flexibility movements. It took little physical effort but did entail intense concentration. What I quickly discovered was that my lower legs weren't strong enough to support me for very long. I added one-legged partial squats to my routine. I also started moving up on curbs during my walk and balancing on one leg if I got stuck in a slow-moving line at a store checkout.

I haven't progressed to the point where I'm ready to try out for a high-wire act, but I'm up to half a minute on both legs and am steadily improving. I can also feel the difference as I move about during the day. It's really a matter of recognizing weak areas and making the necessary adjustments.

Although I'm quite aware, from reading Bill Clark's newsletter PL/USA and letters from friends, that there are many older men who are still moving impressive poundages, I believe most older athletes would benefit from following the fitness philosophy of that remarkable nonagenarian Jack LaLanne. Even if you don't feel you're quite ready for a high-rep program, it's a smart idea to understand what to do when you are ready.