# PRECAUTIONS/CONSIDERATIONS
# FOR SLOW MOTION, HIGH INTENSITY EXERCISES

While slow motion, high intensity strength training is very safe, it is also very powerful. And like any new power tool, you need to understand how it works and what the precautions are.

### Introduction

The first two sessions are designed to acquaint me with your medical history and goals, as well as starting instruction with the equipment to determine your correct weights and positioning.

I will not be attempting to exercise you to the maximum intensity until the third session. If you feel an exercise effect (such as muscle burning or fatigue) during the sessions, that is acceptable, but not the intention. We will be learning and rehearsing the techniques of slow motion, high intensity strength training.

### Precautions

Precautions will be reviewed with you verbally prior to your session, in addition to your review of them in written form here.

### Breathe

Never hold your breath. Always ventilate freely. This is easier said than done and there exists a natural tendency to hold your breath when exerting against something.

To hold your breath often involves Valsalva. This is a medical phenomenon that incorporates a back pressure behind a closed glotis. It blocks venous return and drives blood pressure to dangerously high levels.

Do not put a scheme to breathing. The old weight lifting adage was, "Breathe in as you lift, breathe out as you lower." This is a myth. If you limit your breathing in any way, you are engaging a partial Valsalva.

Your early attempts to combat Valsalva may lead to dizziness. Do not be concerned with a little dizziness due to this hypocapnia. Preferentially accept dizziness under any conditions in lieu of the potential hazards of Valsalva.

Also do not excessively grip, grimace, or grit your teeth. These activities also unnecessarily and dramatically raise blood pressure. I will assist you in proper breathing. Eventually you will learn to breathe freely without forced and excessive ventilation.

## Headaches

If you arrive for your workout with a headache, first discuss and describe it to me. Depending on its origin and type, I may or may not wish for you to exercise. Some tension headaches are relieved with exercise. Others such as migraines and sinus headaches are often worsened. Regardless of the decision to exercise, you must terminate the workout at the least sign of intensification.

If you arrive for a workout headache-free yet develop the slightest head pain during the workout, immediately cease exercise and report the headache to me.

Remain cautious of a bizarre type of headache-exercise induced. Although it may seem minor at first, exercise induced headaches (EIH) is a serious concern. It may develop from a present condition or arise independently.

EIH comes on like this: You are performing an exercise --not necessarily intensely--and you begin to believe that you imagine a slight head pain. Since you believe that you imagine this, you discount it and continue the exercise. Within the next one-to-three repetitions it intensifies to feel as though a bolt of lightning strikes you in the back of the head and cracks your skull around into one of your eyes. It is so painful that you can hardly see out of that eye. If well established it may ache from two days to two weeks.

EIH can be a dramatic setback to your exercise program. It may require as much as a two-week layoff.

There has been success at working around the EIH problem in almost 100% of the subjects who have incurred it. I do this with special workouts, with emphasis on neck strengthening, and relaxation techniques.

It is vital to recognize and heed the early warning sign to avoid EIH. When you believe that you are imagining a head pain, you must cease the exercise, unload your musculature, and inform me. No matter how much you want to continue or to obey my instructions, I want you to stop at the slightest hint of EIH.

## Head Stabilization

Your head and neck musculature is under load, either directly or indirectly, in most exercises.

Although I wish to strengthen your head and neck musculature with direct exercises for this area, it is desirable to minimize its tension in exercises for other areas of the body. We do this to some extent by holding the head and neck in a neutral position.

It is my position as your instructor, to place your head or to teach you to hold your head in a neutral position. But it is your responsibility to keep it there.

Abstain from suddenly turning your head to make eye contact with me, to discover who just opened the front door, to greet a friend, or to toss your head to flip your hair out of your eyes. Instead, keep your head motionless and in a neutral position for each exercise.

Neutral positions of the head can be determined by taking your fist, and placing it between the chin and the chest. You will be looking almost straight ahead with that position.

**Clear Your Mouth**

Never workout with gum or candy in your mouth. During more labored breathing you might aspirate it, the results being a life threatening medical emergency.

**Exercise More To Reduce Muscular Soreness**

The cause of delayed-onset muscular soreness is not known. It is commonly blamed on a buildup of lactic acid, stretching, micro tears in the muscle, using different muscle groups, an abrupt increase in the intensity of muscular work, or an abrupt decrease of intensity. We now realize that none of these factors completely explains its cause. Muscular soreness is an enigma.

Some people like to get sore. They use it as a measure of a good workout. Muscular soreness is not usually unhealthy, nor is it necessarily an indication of a good workout.

Most people do not like muscular soreness. In the event that such soreness occurs, please let me know. I will administer another workout session to alleviate the soreness. If you procrastinate, the intensity of the muscular soreness can increase.

**S L O W**

This slow motion, high intensity method of exercise incorporates very slow movement. The general method is to lift the weights in 10 seconds and lower the weights in 5 to 10 seconds, based on the exercise being performed and the type of equipment.

For simplicity I speak of the positive phase being performed in 10 seconds, and the negative phase being performed in 5 to 10 seconds. Realize that "positive" or "positive phase" refers to the weight rising. "Negative" or "negative phase" refers to the weight descending.

If I say, "slow your positive," both you and I must agree on which phase is the positive. In some exercises, your body may be descending as the weight is ascending. Remember that the common denominator for the agreed definition is what the weights are doing, not your body.

You are probably wondering: "How you can determine 10, or 5 seconds." At first, I will cadence count for you. I will do it like so: "0, 1, 2, 3, 4, halfway, 6, 7, 8, 9, 10." I say, "halfway" at the 5 second mark to provide you with a beginning, middle, and end to pace

against. Sometimes, I will alternate between cadence counting and coaxing. Eventually, I will say very little. Once your competence in each exercise has improved, constant counting and coaxing can actually distract you from intense concentration.

Sometimes I will need to indicate "move slower" or "move faster" as I am cadence counting. If amidst a cadence count I hold my hand up, I mean "move slower". If I twirl a finger, I mean "move somewhat faster".

If I want you to stop, I will say "stop." If so, hold your present position. Do not unload.

Do not cadence count for yourself-either verbally or silently. If you do, you will neglect attention from four or five other aspects of the exercise. Instead, try to develop a feel for the proper speed. In time you will.

Whenever in doubt it is safer to move too slowly than too fast.

Although unlikely, it is possible to move too slowly. This can be secondary to friction and resistance in the equipment. If this occurs, you tend to bog down-starting and stopping with lost sense of position and movement.

In the event you bog down, I will say "go slightly faster". Clearly understand that I never mean "go fast". I mean "go less slowly". Hand motions will also be used.

You will be surprised that after a few sessions you will begin to determine what 10 seconds or 5 seconds is from mere repetition.

**Time Under Load (TUL)**

You will note while exercising, I will use a stop watch to record the time your muscles are loaded with a resistance. This, along with the rate of resistance, is how I standardize your status, and together we follow your progress with each muscle group.

You will see that we now have two avenues of approach to motivate and record progress.

TUL encourages good form because you get credit for every second you are underload. In fact, you may hear me say "Slow...milk it for time".

After a few sessions, I will identify your "ideal" TUL and continue to add weight.

**Considerations**

**Dress Cool**

During your workout it is important to remain cool. Most appropriate is a short sleeved t-shirt with flexible shorts and some garden-variety gym shoes. For safety and consistent positioning in leg press, always wear shoes.

If you prefer not to wear shorts, the usual "workout" pants and jacket are fine. Just do not wear street clothes or denim even in the form of cut-off jeans, as it is often trimmed with small metal buttons that can tear upholstery.

Remove keys, wallet, change, and any other non-essential bulk from your pockets. Avoid belts, especially those with large buckles. If you are required to wear a pager, keep it nearby but not on your person.

**Stay Hydrated**

Increased water consumption is recommended from a fat-loss perspective. You will want to drink up to 6-8 glasses of water per day, up to one gallon!

Your mouth may become dry at times during the workout. This results from the labored breathing that dries the air passages. Although this may be annoying and is relieved by a few sips of water, it does not indicate a true state of dehydration.

If we are in a situation where water is not immediately available, plastic water bottles are convenient for access as well as for tracking consumption volume.

I will make sure that some form of water is available if you are not carrying a water container.

**Concentrate**

To get the very best workout possible, you must concentrate. Pay close attention to my instructions and corrections, from the start of the first repetition to the last.

Do not socialize. This is not meant to be unpleasant or unfriendly. It is meant to enable you to receive an intensive workout.

Realize that injuries most often occur under the following conditions:
- During the first repetition
- As you are entering or exiting the exercise machine
- When you move too fast
- When you are distracted by unnecessary conversation as you perform the exercise movements

Some people try to dis-involve themselves from their exercise. They wear radios or listen to loud music to get their mind *off their exercise*. On the contrary, ***they need to get their minds on their exercise*** to concentrate harder, to work harder, and thus, to reap better results from their program.

In addition, if you have questions regarding any of your program, never be afraid to ask even the simplest questions. I want you to be as knowledgeable as possible about how I feel exercise should be accomplished for maximum results.