



Start-Up Guide

This booklet provides a guide to starting an exercise regime. *Please remember that you should consult with a physician before beginning any exercise program.*

Welcome to an exciting journey of change.

At J & S Fitness we offer fitness with you in mind. From your first visit to our family-run enterprise you become part of the J & S family and, as such, you are afforded the finest treatment. Thus, if you need a weight loss program to help you lose those extra pounds, we will assist you in designing such a program. If you want to “bulk up”, we will guide you in designing the right muscle-building routine. Or, if you simply want to maintain your fitness level and, or physic we are also willing and able to assist you. At J & S Fitness, we do not promise miracles, we simply provide the opportunity for you to reach your optimal potential. With the right program, attitude and support system (the J & S Family) you can attain your goals.

The *Start-Up Guide* is designed to introduce you to the major equipment and machinery offered at J & S Fitness and, more importantly, to guide you through establishing a workout regime to meet you goals. This Guide is not intended to eliminate personal interaction with our staff so, feel free to ask us any questions that you may have.

Many people fail at exercise programs not because of a lack of desire, focus or motivation but because they have no firm direction of what they want to achieve. Therefore, before you begin any exercise program you should **set yourself clear goals and objectives.**

Goals

Your workout goal should provide an overall perspective of what you want to achieve. Common workout goals include: (1) to lose weight; (2) to gain muscle mass; or, (3) to increase your fitness level.

Objectives

On the other hand, your workout objectives should be well defined targets that you want to achieve. In this regard, objectives should be **SMARTER**...

...be Specific and Measurable

Your objectives should be clear and precise, incorporating measurable targets. It is not sufficient to simply have a goal to lose weight or to keep fit but one should also develop a clear outline of where you hope to be within a defined period of time. For example, aim to lose 5 lbs in one month or aim to successfully complete 'cardio level 5' on the treadmill by the end of the month.

... be Achievable and Realistic

Consider both what can be done and what you can do when setting goals. Remember, **unrealistic goals generally lead to frustration and disappointment** and, ultimately they lead to failure in, and the quitting of, the workout regime. Thus, one must certainly be aware of the realms of possibility when setting objectives.

*... be **Time-Constrained***

Always remember the element of time. Establishing some sort of time constraint is critical in developing a baseline against which success can be measured. For example, if you aim to lose 5 lbs in one month then, at the end of the month it will be time to assess your performance.

Additionally, time should be considered in classifying your goals and objectives as **you should develop both long-term (six months to one year) and short-term (daily, weekly and, or monthly) goals and objectives.** Short-term goals should be designed to act as small stepping stones towards your long term goals (e.g. short term goal – walk for ½ hour on the treadmill; long term goal – run for ½ hour on the treadmill).

*... be **Enduring***

Goal setting is as much an art as it is a science; thus, it is natural that you may not get things right the first time. You may be too optimistic in setting goals and, as such, you may fall short your first time around. Conversely, you might have been pessimistic and, hence, found your goal very easy to achieve. Either way, your goals need to be constantly adjusted over time to keep them challenging but attainable. Remember the old maxim “If at first you don’t succeed try and try again.” So, **make Goal # 1 maintaining a healthy and active lifestyle, through constant and regular exercise (say at least 3 days a week, 30 minutes a day), from now on and forever more.**

Be sure to enter you major workout goals and objectives in the space provided in your **Workout Index Card**

COMMON MYTHS & FREQUENTLY ASKED QUESTIONS

Is it better to do cardio before weights or the other way around?

Depending on whom you ask or where you do your research you will get varying answers with both sides giving scientific evidence why their answer is better. I would advise you to choose which one you would generally do first depending on; (1) which portion of the workout you want to emphasise most during your session and (2) which portion is more essential to your overall workout goals. Remember, you will be fresher for the portion of the exercise you do first and would generally give a better output, and workout at a higher intensity, compared to the portion you do second.

GYM MACHINERY AND EQUIPMENT

J & S Fitness is well-equipped with a wide range of cardio and weight equipment. This section is designed to guide you through the basic features of the major categories of gym machinery and equipment. **There is no need to feel intimidated by the machinery as, they are relatively simple to operate. Additionally, our friendly staff is always willing and able to guide you through the use of the machinery.**

The Cardio Equipment

Treadmills (Cybex Sports+ 515T & Cybex Pro3)

Treadmills are one of the most popular pieces of cardio equipment as they facilitate one of the most basic, and familiar, exercise movements: walking. As such, treadmills are one of the easiest machines to start out using. Incorporating a range of incline and decline movement, treadmills allows one to simulate a variety of workout terrains, from flat ground to rolling hills, to be conquered.

Arc Trainers (Cybex 600A, 610A & 750AT)

The Arc Trainer, or Cross Trainer, has the ability to combine elements of a climber, hiker, and cross-country skier to produce an unmatched number of workout combinations. Arc Trainers utilize a unique arc motion which engages your muscles and not your joints, thereby allowing you to burn more calories in less time compared to other cardio equipment. Additionally, the use of its varying resistance and incline levels gives you the ability to target the same area in different ways (e.g. to build muscle, burn calories, or both). Arc Trainers are therefore well-suited for a “workout novice” and a professional athlete alike.

Stationary Bikes (Cybex Cyclone 530C and Cyclone 530R)

Stationary bikes offer a low intensity cardio workout targeting the legs and buttock muscles. The ease and comfort of the bike allows one to spend long periods of time working-out without experiencing undue fatigue. However, this ability to spend an extended period of time exercising is essential to the effectiveness of the bike as, compared to other cardio equipment, the average rate of calories burned on the bike, per minute of use, is usually lower.

There are two types of stationary bikes at J & S Fitness; (1) Upright Bikes (Cybex 530C) and (2) Recumbent Bikes (Cybex 530R). The recumbent bikes offers back support and a 45° angle of pedalling which combine to make this bike best suited for persons with back, knee and/or hip problems.

Steppers (Cybex 530S Steppers)

Steppers, or stair steppers as they are commonly called, are cardio machines which specifically target your legs and buttocks muscles by mimicking the motion of climbing stairs. Steppers are very popular pieces of cardio equipment, especially with females, since they provide an excellent opportunity for great lower body strength development and toning.

The steppers available at J & S Fitness are *Cybex 530S Steppers*.

are stabilizing or assisting muscles when you train your larger muscles, therefore if these smaller muscles are fatigued you will not be able to effectively train your larger muscles due to the premature failure of the stabilizing or assisting muscles during the exercise movement. In this same manner, compound exercises (those that work more than one muscle group and joint at one time) - e.g. chest press, leg press, squats - should be done before isolation-type exercises - e.g. leg extension, biceps curl, triceps press, leg curl.

I began working out about 3 months ago and saw quick initial gains, however these gains slowed and have now stopped and I feel like if I am not progressing anymore. What am I doing wrong?

It is not necessarily what you are doing wrong, but simply What You Are No Longer Doing..... - Challenging your body. What you described is called a plateau effect and occurs when the body is no longer being overloaded or challenged to reach new limits. This generally happens when someone has been following the same workout routine for a long period of time without any significant increase in intensity. To begin challenging your body again you need to increase the intensity of your workout. In relation to weight training this can be done by increasing (1) the weights lifted, (2) the sets done per exercise, (3) the reps done per set, (4) decreasing the rest in between sets or (5) rearranging the order in which you do the exercises in. In relation to cardio this can be done by increasing (1) your speed or resistance (depending on the type of equipment being used), intermittently throughout the program (2) your incline or (3) the length of time done.

COMMON MYTHS & FREQUENTLY ASKED QUESTIONS

simple daily calorie equation; your daily calorie expenditure must be higher than your daily calorie intake. It does not matter what time of the day you consume these calories. Therefore, while this statement is not true, the use of this theory can be effective in helping you lose weight as it helps restrict your daily calorie intake.

Frequently Asked Questions

I am in my sixties and have never lifted weights in my life. Am I too old to start lifting weights now?

No you are not. As a result of the aging process, persons begin to lose muscle mass (sarcopenia), and muscle strength, after the age of 30, with this decrease being approximately 3-5% per decade in physically inactive persons. After the age of 50 this rate accelerates significantly if no form of resistance or strength training is done to maintain muscle mass and strength. This loss of muscle results in functional activities (everyday tasks) becoming harder as you get older. Studies have shown that people in their seventies and eighties who began a weight training program for the first time showed significant gains in muscle size and strength which resulted in a better quality of life as a result of being able to carry out daily activities (e.g. walking, lifting objects, and standing up unassisted) easier.

What is the best order to perform weights exercises?

There is no “best order” to perform weights exercises. However the general rule is that it is best to train your larger muscles (e.g. chest, back, legs) before your smaller muscles (e.g. biceps, triceps, calves). This is because; (1) training the larger muscles requires more energy, and (2) many of the smaller muscles

GYM MACHINERY AND EQUIPMENT CONT'D

Rowers (Concept 2 Indoor Rowers)

Rowing is universally recognized as the perfect aerobic exercise as it encompasses a smooth, low impact, rhythmic, total body exercise employing the use of your upper, lower and core muscles. As a result of the many muscles involved in the rowing motion, rowing has great calorie burning potential, with a lower rate of perceived level of exertion compared to other cardio exercises. Rowing exercises also help to maintain, or improve, flexibility around some of the major joints.

The type of Rowers at J & S Fitness are the *Concept 2 Indoor Rowers*, which use wind resistance to change its intensity levels.



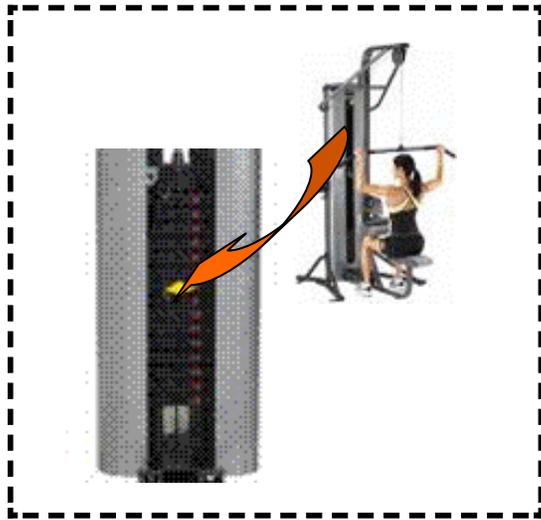
Picture 1: A Picture of the Concept 2 Indoor Rower

The Weight Training Equipment

J & S Fitness' weight rooms are well equipped with a wide range of state of the art *plate loaded* and *weight stack machines* from CYBEX.

Weight Stack Machines

As the name suggests, a weight stack machine carries pre-stacked weights whereby one only has to remove and insert a pin to obtain the weight that one desires (see Picture 2). Thus, one eliminates the added step of adding and removing weight plates.



Picture 2: A Picture of a Weight Stack Illustrated on the Cybex Lateral Pull down

Running is the best cardio exercise to get in shape

Running is a great cardio exercise to help you get in shape. However, it does not suit everyone as it can be hard on your joints. There are many other great outdoor and indoor cardio exercises (e.g. walking, cycling and rowing) which can help you get in shape in a similar fashion to running. The point here is that there is no general “best” cardio exercise to help you get in shape. Ultimately, the “best” cardio exercise to help you get in shape is one which you find enjoyable and can stay committed to doing over a prolonged period of time.

Crash dieting makes you lose weight

This statement may be true in the short term, but crash dieting ultimately does more harm than good, and hinders your long term weight loss goals due to the fact that crash dieting not only removes fat but also lean muscle and tissue. This loss of lean muscle would cause a fall in your basic metabolic rate, therefore resulting in your body needing fewer calories than it previously did, making weight gain more likely once you stop the crash diet.

You should not eat late in the evening if you want to lose weight

This statement uses the logic that calories consumed at night are more likely to be stored as fat due to a lack of activity. While this logic is understandable, and not eating late in the evening can be an excellent tool in helping you achieve your weight loss goals (it prevents you from eating empty calories from high calorie snacks, and can help cut your daily calorie intake by as much as 1000 calories), eating late in the evening would not be the main reason why you do not lose weight, as weight loss comes down to a

COMMON MYTHS & FREQUENTLY ASKED QUESTIONS

Common Myths

If I do a lot of abdominal work I will lose my abdominal fat and get a flat stomach.

This misconception is called spot reducing (specifically targeting one particular area to reduce its size), and does NOT work!!! Overall body fat must be reduced for you to lose fat in one particular area, with the pattern of fat loss which occurs being dependent on individual factors such as genetics, sex and age. However, doing exercises aimed at targeting a specific area produces a stronger, more fit, and toned muscle or area underneath the layer of fat, which would become more recognized to you after the overlying layer of fat has been decreased.

Women should not lift weights because it will get them big and make them look bulky

This is a common misconception which could not be further from the truth, as testosterone, which is found in significantly smaller quantities in women compared to men, is one of the main hormones which allows you to gain muscle mass and therefore the lack of this hormone in women would generally prevent them from gaining a significant amount of muscle mass (Female bodybuilders who have very masculine physiques lift heavy weights for several hours each day and in many cases take muscle building supplements or even steroids). In fact, weight training has been scientifically proven to be an essential part of female weight loss, or weight maintenance goals, as weight training raises your resting metabolic rate (you burn more calories throughout the day) and increases your fat burning lean tissue.

GYM MACHINERY AND EQUIPMENT CONT'D

As illustrated below, on most of the weight stack machines there are exercise displays of;

1. the name of the exercise to be executed;
2. a step by step guide of how to perform the exercise;
3. a diagram of the 'starting' and 'finishing' position of the exercise; and,
4. a diagram of the muscles which the exercise works.



Picture 3: A Picture of the Exercise Displays found on most of the Weight Stack Machines at J & S Fitness

Plate Loaded Machines

Unlike the weight stack machine, a plate loaded machine requires you to stack plates to obtain the weight that you are desirous of using (see Picture 4). However, the extra step of stacking plates may well be worth it as one can use a heavier weight than is permitted by the weight stack machines. The plate range carried by J & S Fitness runs from 2 ½ lbs to 45 lbs each.

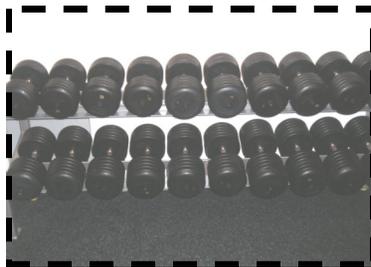
On the weight stack machines each weight bar is 12 ½ lbs (approximately 5 ½ kg). There are also ½ weight plates which can be added to the top of the weight stack to give an intermittent weight.



Picture 4: A Picture of a Cybex Plate-loaded Conversion Incline Bench Press

Free Weight and Dumbbells

J & S Fitness also accommodates free weights, with bars ranging from 15 lbs in weight up to the 45 lbs, and weights ranging from 2 ½ lbs to 45 lbs. Additionally, there are dumbbells ranging from 1 lb to 150 lbs.



Picture 5: Dumbbells

STEP 4: Determine the Amount of Rest to take between Sets

This depends on the intensity of the exercise in relation to the reps you complete per set.

A Table Showing The Relevant Rest Typically Used Between Sets Depending On The Reps Done Per Set

Resistance	Reps Per Set	Rest Between Sets
Light	> 13	30 sec - 1 min
Moderate	8 to 12	1 min - 3 mins
Heavy	< 7	> 3 mins

Training Log

A training log is a daily accurate record of your workouts. Such a log should not only contain the exercises that were executed but it should also contain your goals, - both short term (weekly, daily, monthly) and long term (6 months to 1 year) - along with general comments about your exercise sessions (e.g. if you felt tired before you started or if you did not feel like working out) as outside influences can effect your training session. Keeping a training log not only allows you to track your progress overtime but it also acts as a good motivational tool.

DESIGNING A WORKOUT ROUTINE CONT'D

STEP 2: Choose the Correct Weight

This involves a trial and error process whereby, one seeks to find a weight that is neither too heavy nor too light. The correct weight is one where you can complete the desired reps with the final three to five reps in the set being challenging. Therefore if you completed the desired repetitions easily without any difficulty the weight you are using is too light and should be increased. Similarly, if you fail to complete the desired repetitions in the set the weight being used is too heavy and should be reduced. This should be assessed on the first set of the exercise as if multiple sets are completed muscle fatigue would become a factor and may prevent you from completing the desired number of reps for the following sets. This is natural and is not an implication that the weight is too heavy.

STEP 3: Determine the Number of Sets to be done

It is generally accepted that multiple (2 or more) sets are more beneficial for muscle and strength development compared to a single set. The number of sets performed per exercise would vary depending on the experience of the lifter and the type of strength training program being incorporated. Beginners, or inexperienced lifters, should begin with a single-set program and should progressively increase the number of sets to make continued adaptations in strength. Intermediate and advanced lifters should incorporate between 3 and 6 sets per exercise, as this set range is considered optimal for increasing strength. When deciding on the number of sets per exercise one should also take into consideration the number of sets done per muscle group.

DESIGNING A WORKOUT ROUTINE

There are two essential factors that need to be considered in designing a workout routine: (1) your overall workout goal, and (2) your intended workout frequency (that is, the number of times you plan to workout per week).

Your Overall Workout Goal

By now you have established an overall workout goal/objective (referred to in the previous section of this guide as your long-term goal/objective). This goal/objective may very well be the most important factor in determining your workout regiment as your workout design will vary depending on what you want to achieve. An example is shown below of a program overview of someone whose aim is to lose weight compared to someone whose aim is to put on muscle mass and increase their strength.

<i>Weight Loss</i>	<i>Increase in Muscle Mass and Strength</i>
<ul style="list-style-type: none">• High proportions of cardio in workout regime	<ul style="list-style-type: none">• Workout regime is more weight training oriented
<ul style="list-style-type: none">• Most weight exercises will be between 8 – 20 repetitions (reps) per set	<ul style="list-style-type: none">• Most weight exercises will be between 3 – 12 repetitions (reps) per set
<ul style="list-style-type: none">• 1 or 2 exercises per body part in a single weight session	<ul style="list-style-type: none">• 2 or more exercises per body part in a single weight session
<ul style="list-style-type: none">• More full body oriented weight sessions	<ul style="list-style-type: none">• More single body area (e.g. Upper body, Lower body) oriented weight sessions

Your Intended Workout Frequency

To facilitate appropriate recovery time, a workout regime should be designed around the frequency that one intends to workout per week. (A person working out two to three days a week would not follow the same program as someone working out four or more times a week.) Below are some tips on how to structure your workout sessions based on your intended workout frequency.

Two to Three days per week

- a. All of your sessions should generally contain both cardio and weight training. Yes, your sessions may be a bit longer but, remember you want to challenge both your cardiovascular and muscular system as much as possible during these limited sessions.
- b. If two of the workout days are on consecutive days you should split the workout into two sections doing only cardio on one day and only weights on the next. Alternatively, you may do cardio on both days and split the weight training session into two separate body areas (for example, upper and lower body) doing one body area on the first day and the other on the second. Remember, your muscles generally need at least 48 hours between workouts to recover.

Four or more days per week

- a. Do your cardio sessions and weight sessions on separate days. This would allow you to get the most out of each cardio or weight session. When you do both sessions together you are generally fatigued when you begin the second part of your workout.
- b. If doing weights everyday split your body into two areas (Upper and Lower) and work these areas on alternate days

Designing a Weight Training Program

STEP 1: *Determine the Number of Repetitions per Set*

The number of repetitions (reps) that you should aim to do within a set (a set here being defined as one complete execution of a pre-identified number of reps) is generally related to your overall workout goals. The table below shows the generally accepted repetition range per set to achieve a particular weight training goal.

The Repetitions Generally Used Per Set To Achieve A Particular Weight Training Goal

Weight Training Goal	Reps Per Set
Maximum Strength	1 – 6
Muscle Hypertrophy	7 – 12
Muscle Endurance & Muscle Definition	13 – 25

It should be noted that if your aim is muscle hypertrophy or maximum strength, when starting out your weight training routine your reps should fall within the muscle endurance range, using lighter weights, to allow your muscles to get accustomed to weight training.

Remember, even though you would spend the majority of training time using the repetition range that best fits your workout goals, the periodic cycling of other intensities will enhance this goal.