

### - CONDITIONING TRAINING -

Knowing how to execute a self-defense maneuver is not enough, as you must also have the ability to successfully perform it. This requires conditioning the body ahead of need.

Muscles are typically developed for one of three separate goals:

- To become bulky for aesthetic bodybuilding reasons,
- In order to lift heavy weights for a brief period,
- To manipulate moderate weights for a sustained period.

In self-defense training, where agility and fortitude play an important role, you must first buildup your body to a reasonable level of flexibility and stamina, in order to both prevent self-injury and to execute the maneuvers correctly. In the martial arts, bodybuilding, while often a side effect, is not the focus. Nor is heavy weight lifting, as most of the melee maneuvers use leverage rather than brute strength. In particular, a strong neck, a strong abdomen and strong shoulder girdle will be extremely helpful for preventing training injuries and speeding-up melee training advancement.

For self-defense training you should develop muscles for enough endurance to last through an entire encounter, and to be of sufficient strength to properly execute a melee maneuver against an average weight adult male. When engaged in weightlifting conditioning, begin by first inhaling deeply. As you contract the muscle, exhale. Lifting and lowering weights should be done with a smooth controlled motion, lasting about 2 seconds in each direction. Do not jerk at a weight or force a weight that is too heavy. One muscle contraction and relaxation cycle is called a Repetition. A group of repetitions is called a set.

You should only lift a static moderate weight that corresponds with your current muscle strength, and it should be lifted for ten to fifteen repetitions. 12 repetitions are ideal. Moderate means that the weight is light enough that it can be lifted for the full set of repetitions without straining, but heavy enough that additional repetitions would be a struggle. Never exercise a muscle to failure! If you feel that you are reaching the limit of your ability to lift a weight, STOP, even if you have not reached your repetition set goal.

Take a rest of approximately 1 minute between sets. If you can properly complete a set group at fifteen repetitions, it is time to increase the weight. You should only do a specified number of sets per week. This means that if you train more than once per week, the number of sets you perform each session will decrease so that the total weekly set number will not be exceeded. Do not perform the same weightlifting exercise again for a minimum of about 48 hours, but try not to delay longer than about 96 hours before repeating the exercise. This effectively limits you to a maximum of three sessions per week for any individual muscle conditioning exercise.

## NECK STRENGTHENING

A weak neck limits your ability to perform many exercises and Katas. A weak neck makes you vulnerable to whiplash from a blow or even an intentional rapid body movement. Wrestlers and football players are strongly encouraged to always strengthen their neck.

Neck strengthening is both safe and beneficial as long as it is done properly. Note that crunching and popping sounds may possibly occur when turning the head if the relevant neck muscles have not been stretched in a while, but this is usually nothing of concern.

Neck strengthening exercises are the first strengthening exercises that should be performed during a workout. It is important that you do neck warm ups before any neck strengthening exercise. At the very least, perform several repetitions of swiveling your head alternately between looking back over your Right shoulder and your Left shoulder.

Six exercises are extremely effective at developing the neck muscles. These are the Shrug (lifting the shoulders upwards), Upright Rows (lifting the elbows upwards), the Neck Flexion (bending the head towards the chest), the Neck Extension (bending the head towards the back), the Lateral Flexion Right (bending the head towards the right shoulder), and the Lateral Flexion Left (bending the head towards the left shoulder). Neck muscles should be worked at least twice a week.

## Shrug

### Using Dumbbells:

Firmly grasp a suitably heavy set of dumbbells with your knuckles facing sideways. Sitting on the short end of a bench or alternatively standing with legs locked, straighten your back, face forward and let your arms hang vertically with elbows locked. Slowly over a period of approximately 2 seconds, evenly and without twisting fully elevate the shoulders in a smooth and controlled motion. Do not roll the shoulders. Hold the shoulders in the shrugged position for 1 second. Slowly over a period of approximately 2 seconds, allow your shoulders return to the start position using the same smooth and controlled motion. Pause momentarily, then repeat for a total goal of 12 repetitions.

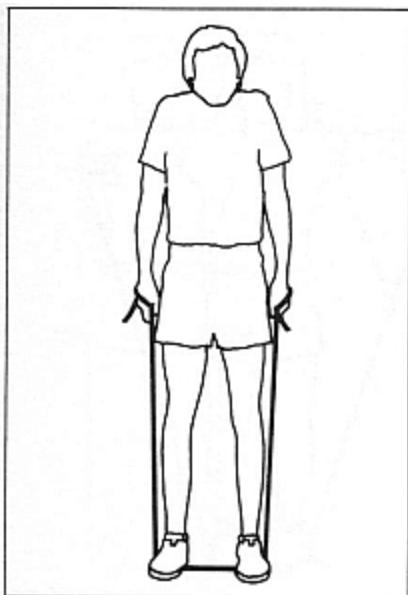
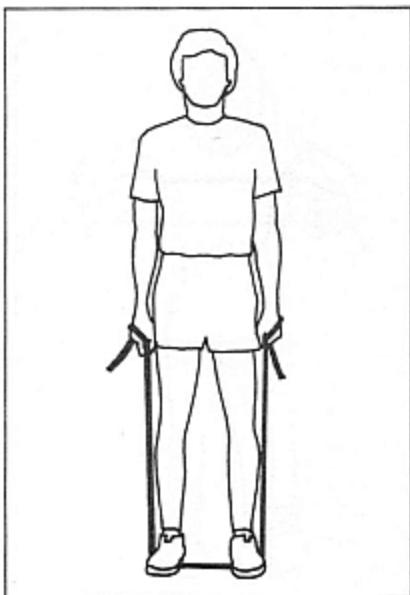


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**Using Tubing:**

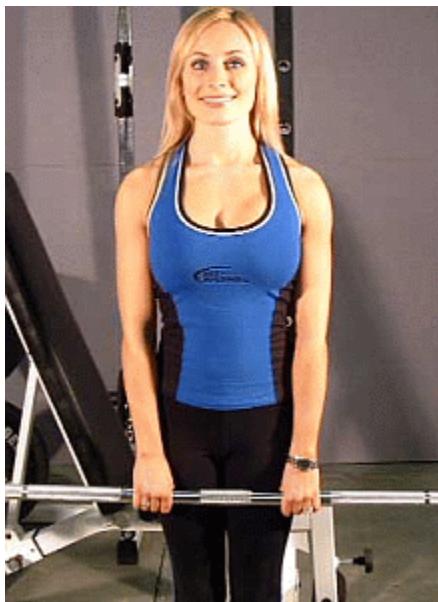
Stand. Place both feet comfortably apart on the center of the tubing. Grasp tubing at knee level, bending knees. Stand up straight, keeping arms straight at your side. Slowly over a period of approximately 2 seconds, evenly and without twisting fully elevate the shoulders in a smooth and controlled motion. Do not roll the shoulders. Hold the shoulders in the shrugged position for 1 second. Slowly over a period of approximately 2 seconds, allow your shoulders return to the start position using the same smooth and controlled motion. Pause momentarily, then repeat for a total goal of 12 repetitions.



## Upright Rows

### Using a Bar:

Using a narrow grip, firmly grasp in front of your body a straight, suitably weighted free-weight bar, with your knuckles facing forwards. Standing with legs locked, straighten your back, face forward and let your arms hang vertically. Slowly over a period of approximately 2 seconds, evenly and without twisting fully elevate the bar directly upwards to collarbone height in a smooth and controlled motion, allowing your elbows to swing outwards. Hold the bar in the lifted position for 1 second. Slowly over a period of approximately 2 seconds, allow your arms return to the start position using the same smooth and controlled motion. Pause momentarily, then repeat for a total goal of 12 repetitions.

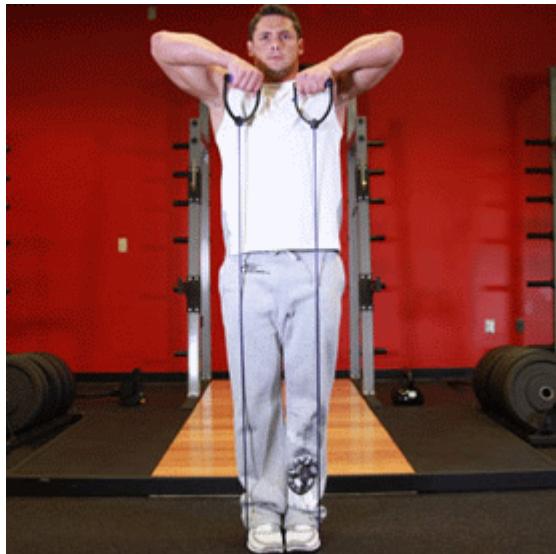
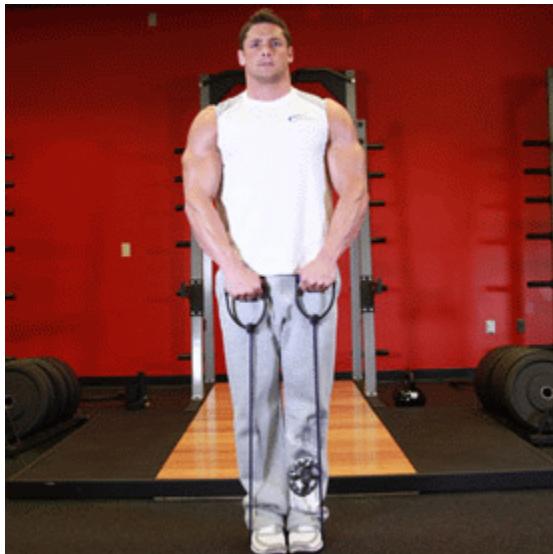


exercise continued

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**Using Tubing:**

Stand. Place both feet together on the center of the tubing. Grasp tubing at knee level, bending knees. Stand up straight, keeping arms straight over the front of your legs. Slowly over a period of approximately 2 seconds, evenly and without twisting fully elevate hands straight up to collarbone height in a smooth and controlled motion, allowing your elbows to swing outwards. Hold the hands in the lifted position for 1 second. Slowly over a period of approximately 2 seconds, allow your hands return to the start position using the same smooth and controlled motion. Pause momentarily, then repeat for a total goal of 12 repetitions.



## Neck Flexion

Using a "Nautilus 4-way Neck" machine:

Select a suitable weight. Adjust seat height so, with back straight and head bent backward, face is centered in cushion. Cross arms so left hand holds right handle and right arm holds left handle. Slowly over a period of approximately 2 seconds, press the cushion forward by bending your neck all the way forward in a smooth and controlled motion. Hold the neck in the forward most position for 1 second. Slowly over a period of approximately 2 seconds, allow your neck to return to the start position using the same smooth and controlled motion. Pause momentarily, then repeat for a total goal of 12 repetitions.



Using Tubing:

Attach one end of tubing to a headband and place the headband around your skull. Insert the opposite end of tubing into the top of a secure doorjamb. Stand erect at a distance from the doorjamb in a position where the downward sloping tube is placed under tension and extending from the back of your head. Slowly over a period of approximately 2 seconds, stretch the tube by bending your neck all the way forward in a smooth and controlled motion. Hold the neck in the forward most position for 1 second. Slowly over a period of approximately 2 seconds, allow your neck to return to the start position using the same smooth and controlled motion. Pause momentarily, then repeat for a total goal of 12 repetitions.



exercise continued

**Using a Free-weight:**

Select a suitable weight. Lay with back supported on a platform, such as a bench or firm mattress, with your head facing forward and unsupported beyond the platform edge so that gravity tries to pull it backwards. Support a free-weight on the front of your skull. A cushion, such as a folded workout towel, is recommended to be placed between your head and the free-weight. As a desirable alternative to a static weight, an assistant can press their hand against the front of your skull. Begin with your neck bent fully rearward. Slowly over a period of approximately 2 seconds, press the weight forward by bending your neck all the way forward in a smooth and controlled motion. Hold the neck in the forward most position for 1 second. Slowly over a period of approximately 2 seconds, allow your neck to return to the start position using the same smooth and controlled motion. Pause momentarily, then repeat for a total goal of 12 repetitions.

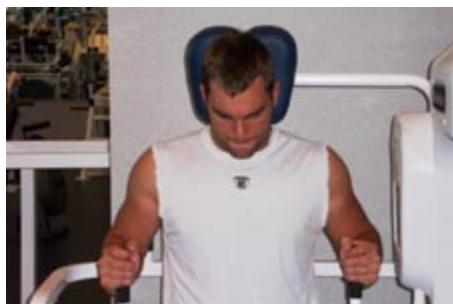
To avoid injury, take extra care to ensure both your body and the weight are in the proper position when performing this exercise.



## Neck Extension

Using a "Nautilus 4-way Neck" machine:

Select a suitable weight. Adjust seat height so, with back straight and head bent forward, back of skull is centered in cushion. Hold the right handle with the right hand and the left handle with the left hand. Slowly over a period of approximately 2 seconds, press the cushion backward by bending your neck all the way backward in a smooth and controlled motion. Hold the neck in the rearward most position for 1 second. Slowly over a period of approximately 2 seconds, allow your neck to return to the start position using the same smooth and controlled motion. Pause momentarily, then repeat for a total goal of 12 repetitions.



Using Tubing:

Attach one end of tubing to a headband and place the headband around your skull. Insert the opposite end of tubing into the top of a secure doorjamb. Stand erect at a distance from the doorjamb in a position where the downward sloping tube is placed under tension and extending from the front of your head. Slowly over a period of approximately 2 seconds, stretch the tube by bending your neck all the way rearward in a smooth and controlled motion. Hold the neck in the rearward most position for 1 second. Slowly over a period of approximately 2 seconds, allow your neck to return to the start position using the same smooth and controlled motion. Pause momentarily, then repeat for a total goal of 12 repetitions.



exercise continued

**Using a Free-weight:**

Select a suitable weight. Lay with chest supported on a platform, such as a bench or firm mattress, with your head facing forward and unsupported beyond the platform edge so that gravity tries to pull it forward. Support a free-weight on the rear of your skull. A cushion, such as a folded workout towel, is recommended to be placed between your head and the free-weight. As a desirable alternative to a static weight, an assistant can press their hand against the rear of your skull. Begin with your neck bent fully forward. Slowly over a period of approximately 2 seconds, press the weight backward by bending your neck all the way backward in a smooth and controlled motion. Hold the neck in the backward most position for 1 second. Slowly over a period of approximately 2 seconds, allow your neck to return to the start position using the same smooth and controlled motion. Pause momentarily, then repeat for a total goal of 12 repetitions.

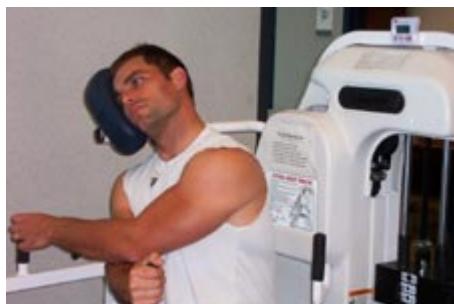
To avoid injury, take extra care to ensure both your body and the weight are in the proper position when performing this exercise.



## Lateral Flexion Right

Using a "Nautilus 4-way Neck" machine:

Select a suitable weight. Adjust seat height so, with back straight and head bent leftward, skull is centered in cushion. Cross arms so left hand holds right handle and right arm holds left handle. Slowly over a period of approximately 2 seconds, press the cushion towards the right shoulder by bending your neck all the way rightward in a smooth and controlled motion. Hold the neck in the rightward most position for 1 second. Slowly over a period of approximately 2 seconds, allow your neck to return to the start position using the same smooth and controlled motion. Pause momentarily, then repeat for a total goal of 12 repetitions.



Using Tubing:

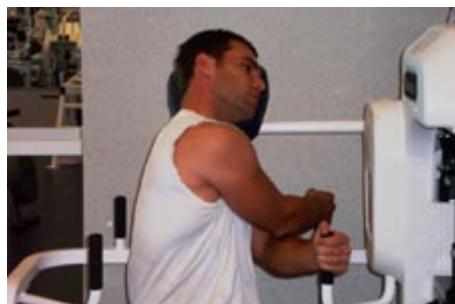
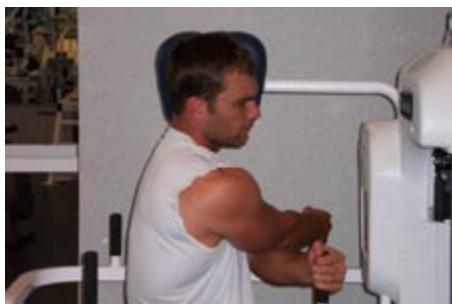
Attach one end of tubing to a headband and place the headband around your skull. Insert the opposite end of tubing into the top of a secure doorjamb. Stand erect at a distance from the doorjamb in a position where the downward sloping tube is placed under tension and extending from the left of your head. Slowly over a period of approximately 2 seconds, stretch the tube by bending your neck all the way rightward in a smooth and controlled motion. Hold the neck in the rightward most position for 1 second. Slowly over a period of approximately 2 seconds, allow your neck to return to the start position using the same smooth and controlled motion. Pause momentarily, then repeat for a total goal of 12 repetitions.



## Lateral Flexion Left

Using a "Nautilus 4-way Neck" machine:

Select a suitable weight. Adjust seat height so, with back straight and head bent rightward, skull is centered in cushion. Cross arms so left hand holds right handle and right arm holds left handle. Slowly over a period of approximately 2 seconds, press the cushion towards the left shoulder by bending your neck all the way leftward in a smooth and controlled motion. Hold the neck in the leftward most position for 1 second. Slowly over a period of approximately 2 seconds, allow your neck to return to the start position using the same smooth and controlled motion. Pause momentarily, then repeat for a total goal of 12 repetitions.



Using Tubing:

Attach one end of tubing to a headband and place the headband around your skull. Insert the opposite end of tubing into the top of a secure doorjamb. Stand erect at a distance from the doorjamb in a position where the downward sloping tube is placed under tension and extending from the right of your head. Slowly over a period of approximately 2 seconds, stretch the tube by bending your neck all the way leftward in a smooth and controlled motion. Hold the neck in the leftward most position for 1 second. Slowly over a period of approximately 2 seconds, allow your neck to return to the start position using the same smooth and controlled motion. Pause momentarily, then repeat for a total goal of 12 repetitions.

