




# weightlifting



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## About the Tutorial

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Weightlifting, a game of brute power, requires impeccable ballistic skills and laboriously-attained physical prowess to successfully implement both its defensive and offensive moves.

This tutorial aims to introduce the rudimentary aspects of the governing rules of the weightlifting, the course of actions while playing it, the equipment and apparels used, and the champions associated with this game.

## Audience

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This tutorial provides information about weightlifting. Anyone who wishes to know about the fundamentals of the game will find this tutorial helpful. It has been dealt in a way so as to give its audience an overview, even if he/she has no pre-knowledge about weightlifting.

## Prerequisites

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No prerequisites on the technicalities of the game is required, but love for weightlifting and inquisitiveness to learn about the game is all that is wished for.

## Copyright & Disclaimer

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# 1. Weightlifting – Overview

Weightlifting is an athletic discipline which requires lifting of heavy weights in a progressive manner. It not only tests the physical prowess of an individual but also his/her rate of force generation, i.e., ballistic actions of lifting the weights in minimum amount of time.

This sport has its root in ancient Egyptian and Greek societies, and was introduced in the international arena for the first time in the 19<sup>th</sup> century at 1896 Athens games. Its popularity has increased many-folds since then and it is played, practised and has its audience all over the world.

The weightlifters need to perform two basic lifts – the **snatch** and **the clean and jerk**. The first involves a continuous motion of lifting the weight over the head in an extended position of arms, whereas the latter is a discrete process which involves lifting the weight to shoulder level and then over the head in an extended position of arms.

The lifters have to lift heavier metal weights in progression. The scoring is based on the cumulative weight lifted by a participant after lifting an official weight, which deems them qualified. The top scorer is adjudged as the winner.

## Team Size

In weightlifting, tournaments are conducted by the International Weightlifting Federation (IFW). Each country is allowed to have a team of ten men and nine women athletes, but only eight men and seven women athletes are allowed to participate. In fact, in each category only single participant is allowed.

## Participating Countries

Weightlifting is considered as one of the most popular competitive sports all over the world. Being a strength testing game, it has its own set of fan following. Both Asian and non-Asian countries participate in abundance in the Asian Games, the World Weightlifting Championship and the Olympics, which gives the testimony of its popularity over the world.

Among Asian countries, weightlifting has its craze in countries like China and Kazakhstan, which also top the list of countries with maximum number of medals in international events like World Weightlifting Championship and the Summer Olympics.

Iran, Indonesia, South Korea, Vietnam, Thailand, Japan, Uzbekistan and Iraq has huge support to weightlifting game and these countries has had a history of producing champions in this sports genre.

In the recently concluded 2014 Asian Games at Incheon, South Korea, around 200 lifters participated from 32 nations with maximum participation from China, Kazakhstan and South Korea.

The United States of America has the best performers in weightlifting tournaments among the non-Asian countries. The success of The United States of America is due to the relentless effort made by the national governing body, the USA Weightlifting (USAW). Events like National Championship and American Open are the pinnacle of weightlifting competitions undertaken by the USAW.

Being originated in Greece, the sport derives huge support in European countries like Turkey, Ukraine, Bulgaria, Russia, Greece etc. The European Weightlifting Federation recognises, organises and facilitates all the major weightlifting events in this region.

## 2. Weightlifting – Playing Environment

### **The Platform**

A platform is a square shaped area having dimensions of 4 metres by 4 metres on which all the lifts should be performed. The platform may be made of plastic, wood or any solid material but must have a non-slippery covering over it. In case the colour of the platform matches with the colour of the floor around it, the platform must have a different coloured border of 150mm along its top edge. Furthermore, the height of the platform should not be more than 150mm from the floor.

### **Field of Play (The Stage)**

The field of play consists of the platform as well as the surrounding floor. Like the platform, it is also square shaped having dimensions 10 metres by 10 metres. A maximum height of 10 metres is allowed, when measured from the level where the Jury and the Referees are positioned. During the time of placing the platform on the stage, each must be affixed to the stage at a minimum distance of 2.5 metres from the front edge and 2 metres from the back edge of the platform. The restraining bars should have maximum height and width of 200mm.

### **Warmup Area**

The participants are provided with warm-up areas, as close as possible to the field of play, with the sole aim of getting themselves prepared for the competition. The warm-up area must be well equipped with the rudimentary necessities such as numbered platforms as per the contestants, barbells, chalks, etc.

# 3. Weightlifting – Equipment

There is many equipment used while playing the game. The details of each equipment are given below.

## Barbell

A barbell is a long rod with weights attached to its ends. The barbells used in weightlifting are certified by the International Weightlifting Federation (IWF). It consists of three basic parts:

1. The bar
2. The discs
3. The collars

## The Bar

The bar of the barbell is made up of steel with **rotating sleeves** of larger diameter at both the ends. The rotation of the sleeve minimizes rotational inertia of the plates to a great level, hence diminishing any chances of injury. According to the norms set by the IFW, men's bar weighs 20kgs. It has the length of 2.2metres and shaft diameter of 28mm. Women's bar weighs 15kgs. It has a length of 2.01 metres and shaft diameter of 25mm. The bar is also provided with a grip texture called the **knurling**, which finds a centre position at men's bar and is absent in women's bar.

## The Discs

The discs, also known as the bumper plates, have rubber design to facilitate dropping of the barbell from different height after each lift. The following disc weights ranging between 0.5kgs to 25kgs with designated colours are used in weightlifting as specified by the IWF.

Weight	Color
25 kg	Red
20 kg	Blue
15 kg	Yellow
10 kg	Green
5 kg	White
2.5 kg	Red
2 kg	Blue
1.5 kg	Yellow
1 kg	Green
0.5 kg	White

All the discs should have their respective weights mentioned over it and the diameter of the largest disc should 450mm with a tolerance of +/- 1mm.

## The Collars

Two collars each of 2.5kg weight are used in order to affix the discs to the bar so that they do not give way.

## Chalk

Chalk is used by the participants on hand and above collarbone to facilitate dryness, and to avert the movement of the bar.

## Information Equipment

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Besides the lifting equipment information equipment are also used in order to check the time the player has taken to lift the weight and to calculate the score.

### Electronic Referee Light System

The control box has three referees. The system is equipped with two push buttons of red and white colour and a signalling-device. It is an apparatus at a height of 0.5 metres from the platform that is kept in front of the participant which is used to give an audible and visual **DOWN**.

**Scales** – Scales with a precision of 10 grams and a capacity to measure 200kgs is provided to the weightlifting arena.

**Timing Clock** – Timing clocks capable of operating uninterrupted for 15 minutes is used. It should be of countdown type and should have a least count of 1 second. The electronic clock must have automatic audible signal before 90 seconds and 30 seconds of the allocated time to the lifter.

**Attempt Board** – An attempt board has the name of the contestant, his/her IWF/IOC country code, attempt number, start number and the amount weight to be taken.

**Scoreboard** – In order to document and record the progress and result of various competitions, scoreboards are set up at various places in the competition arena.



# 4. Weightlifting – Apparels

## Costume

The costume worn by the lifters must be close fitting. It may either be one piece or two pieces, should be collarless, and must envelope the trunk. The competitor needs to make sure that the costume should not cover the knees or the elbows. He/she has the freedom to wear a T-shirt under the costume. They can also opt for close fitting **leotards** over or under the costume but make sure that it doesn't cover their knees. Socks, if worn should not go higher than the knee and must not cover any bandages.

## Weightlifting Footwear

There is no restriction in terms of material used, maximum height of the soles or the shape of the footwear used by the weightlifters. Restriction is only imposed on the height of the upper part of the footwear, which should not exceed more than 130mm from the top of the sole. The purposes for which footwear is used are that they provide a firm stance, stability and protect the feet of the participants while lifting weights.

## Belt

Belt should not be worn under the costume and its width must not exceed 120mm.

## Plasters, Tapes and Bandages

These components can only be worn on the hand, the wrists and the knees though, tapes and plasters may be worn on the fingers or the thumbs. There are some definite set of rules that need to be followed while putting on these apparels.

1. The material used may be leather or gauze.
2. Kneecaps can also be worn.
3. There are restrictions in the length of bandage used over the wrists (100mm) and knees (300mm). The elbows, trunk, thighs, shins and arms should not have any bandages over them.
4. Only one type of bandage is allowed.
5. There should be a separation between the bandage(s) and the body.

# 5. Weightlifting – How to Play?

Weightlifting competition involves the lifters to attempt two lifts-namely **the snatch** and **the clean and the jerk**. The winners are usually decided on the maximum magnitude of weight lifted in each lift and in overall which includes the combination of both the lifts.

In weightlifting, two lifts with the help of both the hands must be executed in the sequence mentioned below-

- The Snatch
- The Clean and the Jerk

For each lift a participant is allowed a maximum of three turns.

## The Snatch

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The participant needs to pull the horizontal barbell placed in front of his/her legs, gripped with the palm in downward position, from the platform to the maximum stretched extent of both arms above the head. This has to be done in a single move with either bent or split leg position.

During the implementation of the lift, the platform is allowed to be touched only by the feet, and no other part. The barbell lifted, must be kept at a motionless position, with the arm and legs fully stretched and feet in the same line as it was before the lifting of barbell. As soon as the entire body of the lifter becomes motionless, the referees give signal to lower the weight and the snatch is complete.

## The Clean and The Jerk

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In this type of lifting the first part is jerk. The participant needs to pull the horizontal barbell placed in front of his/her legs, gripped with the palm in downward position, from the platform to the shoulders.

Splitting or bending of the legs are allowed but the weight should not touch the chest before attaining the final position, though it can slid over the lap and along the thighs during the lift. It should then be placed on the chest above the nipples or on the fully bent arms or on the clavicles. Before performing the jerk, the feet should return to the same line as it was before lifting the weight.

The second part of the lift is **jerk**. From the clean position, the lifter needs to stretch his bent legs and arms to a full position with the weight tightly gripped. The participant needs to ensure his feet are back to the same line as it was before lifting the weight. As soon as the Referees find all his body parts motionless, they signal the lifter to lower the barbell, ensuring the clean and jerk to be complete.

Three attempts are given to each lifter to perform the snatch and the clean and the jerk. In the first session, participants are required to perform their three attempts on snatch, turn by turn. Post a 10 minutes' break, the lifters perform their three attempts on the clean and the jerk.

## Judging

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Three referees are appointed and each has equal rights of decision and verdict on a lift. After a lifter attempts the lift, the referees need to give a "DOWN" signal. The "DOWN" signal may either be for a "Good Lift", signalled by pressing white button, or a "No Lift", signalled by pressing the red button.

As soon as two out of three referees give identical decision, a proper "DOWN" signal is given to the lifter to lower the barbell on the platform. Three (3) seconds after a cumulative "DOWN" signal is displayed; the individual referee decision is shown.

A referee has the freedom to reverse his decision, in case any participant fails to lower the barbell according to the prescribed rules and regulations. The decision has to be changed within three seconds of the original decision. In case, the allotted time of three seconds exceeds, the referee may change his decision by showing a red flag.

## Scoring

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There is an official weight assigned for every lift. A participant must attempt to lift the official weight to garner the highest score. The lifter can then opt to attempt weights of higher magnitude during the course of the event.

Once the highest value has been collected for each lift, the total weight lifted in the snatch is added to the total weight lifted in the clean and jerk. That lifter is adjudged as the champion, who has lifted the highest combined weight. In the case of a tie, the lifter with less body weight is declared as the champion. If they tie even in the bodyweight category, then the lifter who attempted the lift first is declared as the winner.

## Incorrect Movements

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Following movements are not allowed in weightlifting and if any participant is found with these positions and faulty attempts, they are likely to get a **No Lift** as **Down** signal.

1. The platform should not be touched with any part of the body other than the feet.
2. The arms should be fully extended at the completion of a lift. If not so the lift will be adjudicated as a "No Lift".
3. Pause during the extension of arms is not allowed.
4. There should be no bending of the elbows during recovery.
5. The lifter should not replace the barbell on the platform before the referee gives the signal.
6. The lifter should not drop the barbell after the referee's signal, rather down it by releasing it from the shoulder height.
7. If the lifter fails to finish the feet and the barbell in line and parallel to the plane of the trunk, it will be considered as an incorrect movement.
8. Not facing the Centre Referee at the beginning of lift, is considered as an incorrect position.

9. While performing the snatch, there should be no pause and the head of the lifter shouldn't touch the bar.
10. While performing the clean and the jerk, no part of the barbell should touch the thighs, knees, elbows or the arms before placing it over the chest.



## 6. Weightlifting – Variants

In weightlifting, lifters participate in different categories, in accordance with their body weights. Three age groups are recognised by the IWF to distribute their activities, namely:

- **Youth**- up to and including 17 years of age.
- **Junior**- up to and including 20 years of age
- **Senior**- beyond 20 years.

There are eight categories for men and junior men:

- 1- 56 kg
- 2- 62 kg
- 3- 69 kg
- 4- 77 kg
- 5- 85 kg
- 6- 94 kg
- 7- 105 kg
- 8- +105 kg

There are seven categories for women and junior women:

- 1- 48 kg
- 2- 53 kg
- 3- 58 kg
- 4- 63 kg
- 5- 69 kg
- 6- 75 kg
- 7- +75 kg

There are eight categories for youth men (boys):

- 1- 50 kg
- 2- 56 kg
- 3- 62 kg
- 4- 69 kg
- 5- 77 kg
- 6- 85 kg
- 7- 94 kg
- 8- +94 kg

There are seven categories for youth women (girls):

1. 44 kg
2. 48 kg
3. 53 kg
4. 58 kg
5. 63 kg
6. 69 kg
7. +69 kg

All these events must take place in sequence and in accordance with the rules and regulations set by the IWF.

# 7. Weightlifting – Champions

Throughout the year, umpteen weightlifting tournaments are organized across the globe. Among these, only a selected number of tournaments are undertaken, organised and supervised by the International Weightlifting Federation (IFW). These tournaments implement the set of rules and regulations laid down by the IFW. Out of all tournaments, The World Weightlifting Championship and Weightlifting at Summer Olympics are of prime stature and importance.

The World Weightlifting Championship is held annually, whereas Weightlifting at Summer Olympics takes place in every Summer Olympics, i.e., once in four year. However, the tournaments held during Summer Olympics in 1964, 1968, 1972, 1976, 1980 and 1984 were considered as World Weightlifting Championships of the corresponding year.

## **Weightlifting – Champion of Champions**

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There are many weightlifting champions who have won gold, silver, and bronze medals in various categories and tournaments. The details of some of them is given below.

### **Halil Mutlu**

Halil Mutlu is a Turkish weightlifter who has won gold medals in three Olympics consecutively. He has created 20 world records. Along with this, he has also won five world and nine European championships.

He took part in 1992 Olympics and got fifth rank. In 1996, he broke the world record and won a gold medal. In 2000 Olympics also he won gold medal in snatch and clean and jerk categories. He was banned in 2005 for taking steroids and in 2008 Olympics, he informed that he could not lift the targeted weight so he was expelled.

### **Liao Hui**

Liao Hui is a Chinese weightlifter who is an Olympic champion and has also created record in 69 kg category in snatch and clean and jerk and in the combination of both.

He broke junior world record in 2007 and won a gold medal in 2008 Olympics. The world championships held in 2009 and 2013 were also good for him as he won gold medals in both of them.

Liao was banned in 2011 for taking banned drugs. The ban was lifted in 2012 and he again broke the record in 2013 world championship in snatch, clean and jerk and in the combination of both.

### **Hafiz Sulaymanoglu**

Hafiz Sulaymanoglu is a retired Turkish weightlifter having the origin of Azerbaijan. He started his weightlifting career in 1985 in Azerbaijan and got a place in Soviet Union team.

He won the World championship and the European championship titles for Soviet Union in 1989. After that, he immigrated to Turkey and won a gold in 1990 World Championship and 1991 European championship.

He has also taken part in Olympics but could not win any medal. He was also unsuccessful in 1998 and 1999 world championships so he was taken out of the national team by Turkey weightlifting championships.

### **Naim Sulaymanoglu**

Naim Sulaymanoglu is a Turkish weightlifter who has a record of lifting weight of 190 kg in clean and jerk category. He set his first record at the age of 16 and after that he joined the Soviet boycott. Then he moved to Turkey and got its citizenship.

He took part in Seoul Olympics in 1988 and won a gold medal. He also took part in 1989 world championship and won gold medal. He won his second Olympic gold in 1992. After winning gold in 1996 Olympics he retired.

### **Tigran Gevorg Martirosyan**

Tigran Gevorg Martirosyan is an Armenian weightlifter who won his first gold medal in 2004 European Championship in junior category. The next year, he won a gold in the same championship in juniors.

In 2006, he made a debut as a senior player and got sixth rank in world weightlifting championships. In 2007 World Championships, he won silver and the next year, he won gold in World Weightlifting Championship.

In 2008 Olympics, he won a silver medal for his country and became the youngest Olympic medallist from Armenia. In 2009 World Championship, he won silver medal but again won a gold in 2010 in World Weightlifting Championship. He couldn't take part in 2012 Olympics because of his back injury.

### **Nurcan Taylan**

Nurcan Taylan is a Turkish weightlifter who has got six world records. She has won a gold medal in Athens Olympics in 2004. She also has made five world records in 48 kg category.

In World Championships, she won one gold, two silver, and two bronze medals whereas in European championships she has won seven gold medals. She was banned in 2011 for four years as her doping test was positive.

### **Zulfiya Chinshanlo**

Zulfiya Chinshanlo is a weightlifter from Kazakhstan. She has set a world record in 2012 Olympics She has also won a gold in world championship held in 2014.

In London Olympics she lifted the weight on 92kg in snatch lifting and 131kg in clean and jerk which was totalled to 226kg. This let her got the first rank and a gold medal. Besides this she got gold medals in world championships and silver medals in Asian games and Youth Olympic Games.

### **Karnam Malleshwari**

Karnam Malleshwari is an Indian weightlifter who was national champion for nine years. She was champion for two years in 52 kg category and for seven years in 54 kg category.

She started her career in 1992 and won three silver medals in the Asian games. She has also won bronze medals in world championships.

Besides this, she also has got a bronze medal in 2000 summer Olympics held in Sydney. She has received Rajiv Gandhi khel ratna award, Padma Shri, and Arjuna award. In 1995

World Championship and Asian Games, she won gold medals. In 1998 Asian Games, she won a silver medal.

### **Aleksandra Klejnowska**

Aleksandra Klejnowska is a Polish weightlifter who won many medals for her country. She first appeared in 2000 Olympics and got fifth rank.

In 2001 World Championship, she became the world champion as she lifted the weight of 202.5kg. In 2002, she was tested for doping and the results were positive so she was banned for two years.

In 2004, 2008, and 2012 Olympics, she couldn't win any medals. She won the world championship in 2008 by lifting 212 kg.

### **Cao Lei**

Cao Lei is a Chinese weightlifter who started her career in 2001 and won gold in Asian championship. In 2002, she won junior world championship. In 2005, she took part in East Asian Games and got a gold medal.

In 2006, she won two golds one in world weightlifting championship and other in Asian games. In 2007 World Weightlifting Championship she again won a gold medal and in 2008 she won a gold medal in 75 kg division where she lifted a weight of 128 kg in snatch 154 kg in clean and jerk which results in total of 339kg.