Trygve.Com>Exercise> Dictionary of Weightlifting, Bodybuilding, Exercise

# Dictionary of Weightlifting, Bodybuilding, and Exercise Terms and Techniques O

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Many thanks to Deja News for their search engine and database. R

Note that this document is still under construction; terms and definitions are being added every day...but not necessarily at the same time. If you notice some terms are currently lacking definitions, do not adjust your monitor; this is a normal side-effect and should clear up before long. R

# 0-90

## [ 0-9 A B C D E F G H I J K L M NO P Q R S T U V W X Y Z ]

#### 1RMO

see <u>one rep maximum</u>R **6-packO**see <u>six pack</u>R

# **A**(

## [0-9 A B C D E F G H I J K L M NO P Q R S T U V W X Y Z ]

## abduction, abductor

Abduction is movement away from the central axis of the body, an abductor is a muscle whose contraction results in this movement. R

• compare adduction

## Abs, abdominals Odeja

The muscles in the front of the stomach, giving the "six pack" look in people with R sufficiently low bodyfat. Their function is to draw the base of the ribcage and the hips towards each other, as occurs when performing  $\underline{\text{crunches}}$ . Note that conventional  $\underline{\text{sit-ups}}R$  are performed largely by the  $\underline{\text{iliopsoas}}$  muscles R

## acetaminophenO

a common <u>over the counterRanalgesic</u> (pain reliever) that is not a <u>non-steroidal anti-Rinflammatory</u> drug, sold under the brand name Tylenol®, and many others.

It may be used when a pain killer is desired which will not inhibit clotting or produce gastric upset, though it will not provide any anti-inflammatory effects, nor may it be R substituted for aspirin in the <u>ECA stack</u>.R

### achilles tendon

the <u>tendon</u> connecting the lower end of the <u>calf muscle</u> to the back of the heel R **adduction**, **adductorO** 

Abduction is movement away from the central axis of the body, an abductor is a muscle whose contraction results in this movement.

• compare abduction

## adductors, thigh

several muscles located in the upper part of the inner thigh whose function is to pull the legs towards the midline.

# adenosine triphospate, ATP

the molecular "currency" that provides energy within cells for everything from protein synthesis to muscle contraction

## adipose tissue

fat (bodyfat)

# adrenoceptor [deja]

a receptor that responds to hormones (such as epinephrine (adrenaline)) produced by the adrenal gland

## aerobic [deja]

requiring oxygen

when describing exercise, it refers to extended sustained levels of exertion during which metabolic processes that provide energy are dominated by the complete oxidation of nutrients

• compare anaerobic

## agonist

a chemical agent that stimulates, activates, accelerates, or enhances a process in the body

• compare antagonist

## amino acids [deja]

basic building blocks of protein

- see the Misc.Fitness.Weights FAQ: Supplements:Amino Acids
- branched chain amino acids
- essential amino acids

## anabolic, anabolism [deja]

tending to build or repair tissue, muscle tissue in particular

• compare <u>catabolic</u>

# "The Anabolic Diet" [deja]

• see the Misc.Fitness.Weights FAQ: Diets:"The Anabolic Diet"

#### analgesic

tending to reduce or eliminate pain

## androgenic [deja]

producing or accentuating male sexual characteristics (body hair, deepened voice, male pattern baldness). One of the characteristics of steroids, whether synthesized in the lab or naturally in the body is their anabolic-androgenic ratio: if some amount of steroid X produces the same anabolic effects as a given amount of testosterone, how do the androgenic effects compare to those produced by that quantity of testosterone.

## anaerobic

• compare aerobic

## antagonist

- [1] a chemical agent that inhibits, prevents, slows, or stops a process in the body
  - compare agonist
- [2] a muscle that relaxes or stretches during the performance of a movement
  - compare prime mover
  - stabilizer
  - synergist

# anticatabolic

preventing or lessening catabolism

#### aromatase

an enzyme responsible for (among other things) converting testosterone into estrogens aspirin

originally a brand name, aspirin is now a generic term for acetylsalicylic acid (C o H o O 1), a common over the counter non-steroidal anti-inflammatory

Side effects include inhibition of blood clotting (so that it may increase internal bleeding and/or the extent of bruising if used when an injury is fresh), acetaminophen (Tylenol®) may be used when a pain killer without these effects is desired, though it will not provide any anti-inflammatory effects, nor may it be substituted for aspirin in the ECA stack.

#### **ATP**

see adenosine triphospate

# avulse, avulsion

tearing away a body part or structure such as tearing a tendon or ligament off of a bone.

# B

## [ 0-9 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z ]

#### **ballistic**

movement due to momentum rather than muscular control. Ballistic stretching involves "throwing" a body part in order to stretch a joint beyond the range of motion attainable through controlled muscular contraction such as when "bouncing" at the bottom of toetouches. It is an effective technique for causing injury to connective tissue, which can reduce flexibility rather than enhance it.

a straight or curved bar typically five to seven feet in length designed to have weights placed on the ends

• compare dumbbell

## basal metabolic rate

The rate at which the body burns calories while awake but at rest (usually measured in calories per day)

#### bench

bench press [deja]

bench press, narrow grip

## bench shirt

a very tight, sturdy shirt usually made from denim or neoprene theoretically worn for protection during bench press competitions whose main effect is to increase the amount of weight lifted by compressing and straightening the chest and arms.

#### bent row

### beta agonist

a beta-agonist or beta <u>adrenoceptor agonist</u> is a drug or chemical that partially mimics the effects of epinephrine, primarily targeting the beta adrenoceptors which accelerate heart rate and increase blood pressure (beta-1), dilate bronchial passages (beta-2), and release fatty acids from fat cells into the blood stream (all beta receptors). The most commonly encountered beta agonists are asthma drugs such as ephedrine and albuterol which target the beta-2 receptor.

## biceps brachii

the familiar "make a muscle" muscle that flexes the elbow joint. Additionally, the biceps supinates the forearm and helps raise the upper arm at the shoulder.

## biceps femoris

the large, two-headed muscle on the back of the thigh. Contracting this muscle flexes the knee and also extends the hip (only one head of the muscle originates above the hip joint and contributes to this movement).

exercises targeting this muscle include

- leg curls
- stiff-leg deadlifts
- deadlifts
- good mornings

## bioimpedance

the resistance of a path through the body (typically measured between the feet and/or hands), most often used to estimate bodyfat percentages because fat conducts electricity more poorly than muscle.

# biological value

BMI

see body mass index

**BMR** 

see basal metabolic rate

bodybuilding

# bodyfat, bodyfat percentage

The amount of fat in your body, generally expressed as a percentage.

## body mass index, BMI

Yet another way of approximating body composition for use in large-scale medical studies and for health reports to refer to in the popular press. This particular measure is calculated by dividing your mass in kilograms by the square of your height in meters. While such simplistic measures are useful for large statistical samples of the general population, their value is highly limited for individuals, particularly athletes who can be very healthy and have low bodyfat percentages despite having a higher-than-recommended BMI.

• a web-based BMI calculator, bodyfat estimator, and other tools may be found at <a href="Phys">Phys</a>' health calculator page

## bodyopus

• see the Misc.Fitness.Weights FAQ: Diets:bodyopus

#### box squat

a variation on the <u>squat</u> performed with a bench, box, or other solid object under the lifter that stops the decent at the bottom. This can cause excessive compression of the spine and possibly lead to injury.

## brachioradialis

## branched chain amino acids

the <u>amino acids</u> L-leucine, L-isoleucine, and L-valine, so named because of their branched structure. They are a major constituent of muscle tissue and are preferentially consumed during intense exertion or dieting.

• see the Misc.Fitness.Weights FAO: Branched-chain amino acids

#### brown fat

A type of fat cell with a greatly increased density of mitochondria and a much greater blood supply than ordinary "white" fat. Besides being able to store fat, brown fat cells can convert calories directly into heat through a process known as non-shivering thermogenesis. Brown fat is used by mammals to maintain body temperature and to expend excess calories that are consumed but not stored as fat.

# bulking, bulking up

to gain size and mass, preferably (but not always) mostly or entirely muscle and other lean tissue.

• compare cutting

## bumper plate [pic]

a weight plate (almost always olympic) with a rubber outer rim to reduce damage to the floor (and the plate) in case it is dropped. These are most commonly used in <u>olympic lifting</u> where very heavy weights are lifted overhead

## burn

# (

# [0-9ABCDEFGHIJKLMNOPQRSTUVWXYZ]

## cable, cable machine

an exercise machine in which the lifter pulls on a handle attached to a cable. The main difference between an exercise in which the resistance is transmitted through a cable rather than being done with <u>free weights</u> is that the force is in the direction of the cable rather than always pointing downwards. For example, when using a cable machine to perform <u>curls</u>, the cable may continue to provide resistance at the top of the movement while the resistance the <u>biceps</u> must work against when lifting free weights is minimal when the forearm is at or near vertical.

# cable crossover [pic]

#### caffeine

an inhibitor of <u>cAMP</u> phoshodiesterase; it enhances alertness and <u>potentates</u> the effects of other stimulatory drugs by inhibiting the breakdown of cAMP, with the result that cellular processes that are activated tend to remain active longer than they would otherwise.

# calf, calf muscle

the muscle on the back of the lower leg responsible for extending the ankle. The calf muscle has two heads, which connect at the bottom and attach to the heel: the <u>gastrocnemius</u>, the top of which attaches above the knee joint, and the <u>soleus</u> which attaches below. exercises targeting the calf include

- seated calf extensions,
- standing calf extensions,
- donkey calf extensions

calf extensions, donkey [pic]

calf extensions, seated

calf extensions, standing

calipers

## calorie

a unit of energy, equal to the amount of energy needed to heat one gram of water one degree celsius. In common usage, the "calories" most often refer to kilocalories (also known as Kcal or "food calories") which are really 1000 calories.

## cam

similar to a <u>pulley</u>, a cam normally has a cable attached to one point of the rim, an attached axle that transmits rotational force to or from another part of the machine, and a radius that varies with angle, changing the amount of force applied at different parts of the movement in a consistent manner.

## cambered bar [pic]

a <u>barbell</u> with most of the middle offset; used to increase the <u>range of motion</u> in bench pressing and also very effective for avoiding scraped knees while <u>deadlifting</u> and for letting the arms hang straight down during <u>shrugs</u>.

#### cAMP

see cyclic Adenosine Monophosphate

## canthaxanthin [deja]

a carotenoid related to beta carotene used as a red food coloring. When taken in (relatively) large quantities, it imparts a reddish-orange tone to the skin leading to its use as a tanning aid. It is non-toxic and has some antioxidant activity, but prolonged use at high doses has been known to cause crystals to form inside the eye.

## carbohydrate

digestible food components such as starches and sugars that are composed of carbon,

hydrogen, and oxygen, but not nitrogen. Carbohydrates are the main constituent of most vegetables and fruits, provide four calories per gram, and are present only in small quantities in animal products.

- compare protein
- and fat

### carb-up

after any period of carbohydrate depletion, particularly as part of a cyclic ketogenic diet, the consumption of large quantities of carbohydrates with the intent of saturating muscle glycogen stores.

# carpal tunnel

## catabolic, catabolism

tending to break down tissue, muscle tissue in particular

• compare anabolic

cc

cubic centimeter

#### chalk

# cheating, cheat reps

a cheat rep is a repetition performed by deviating from strict form (leaning, adding extra momentum at the bottom of the movement with whole-body motion) after a lifter has reached the point of failure with a given weight.

• compare cheat rep

chinning bar

chins, chin-ups

cholesterol

circuit training

A sequence of exercises performed one after the other with little rest in between. Think of it as being somewhere in between traditional aerobics and traditional weight training.

# citric acid cycle

see Krebs cycle

#### **CKD**

see cyclic ketogenic diet

## **CLA**

see conjugated linoleic acid

clean

clean and jerk

## CNS, Central Nervous System

The brain and spinal cord (in vertebrates)

# collars, weight collars [pic]

any kind of sleeve which may be slipped over the end of a weight bar after the plates have been put on and then tightened to hold the plates securely on the bar. This prevents plates from slipping off the end of the bar, shifting position, or rattling during the exercise.

#### colostrum

a thin, lemon-colored liquid produced by the mother's breasts in the first day or so after giving birth. While colostrum is beneficial for a newborn infant of the same species as the one providing the colostrum, it is not beneficial for adults. Adults do not have the same capacity as a newborn animal to take up entire proteins in the GI system without digesting them first. Do not waste your money on colostrum unless you're less than 6 months old and of bovine origin.

• see the Misc.Fitness.Weights FAQ: Supplements:Colostrum

## compound, compound movement

an exercise that targets a more than muscle or muscle group simultaneously; usually the movement involves flexing or extending at least two joints.

lat pulldowns, squats, and bench presses are compound movements, curls, leg extensions,

and flyes are not.

• compare isolation, isolation movement

#### concentration curls

a type of bicep curl performed one-handed with a dumbbell, the torso leaning far forward and the elbow either directly below the shoulder or somewhat behind. Usually the upper arm is supported by the inner thigh of the lifter, though this is not required.

#### concentric

done as the muscle contracts; "concentric strength" is the weight that can be lifted working against gravity (that's what you usually think of as 'weightlifting')

• compare eccentric

## conjugated linoleic acid (CLA)

A particular structural variant of linoleic acid (a common unsaturated fatty acid). Several studies exist supporting a potential health benefit of conjugated linoleic acid (CLA). No studies suggest that it will aid muscle growth or fat loss. It is food, certainly better than some other fat sources, but treat it accordingly.

• see the Misc.Fitness.Weights FAQ: Supplements:CLA

## corticosteroids

catabolic steroids such as prednisone or cortisol. These are used to reduce inflammation by signalling tissues to break down. While this certainly does have medical uses, corticosteroids will not aid in building muscle--quite the opposite, in fact.

## cortisol, cortisone

a corticosteroid

## cramp, muscle cramp

painful, involuntary muscular contraction

## creatine

Naturally occurring in muscle tissue, creatine functions as a secondary reservoir for shortterm energy to be drawn upon when ATP (adenosine triphosphate) stores--the energy storage molecule that drives muscular contraction--are depleted. Supplemental creatine monohydrate added to the diet will increase the concentration of creatine phosphate within muscle tissue which may increase one's ability to perform brief, high-intensity exercise.

• see the Misc.Fitness.Weights FAQ: Supplements:Creatine

## crossover, crossover machine

see cable crossover

## crunches

an exercise performed by "curling" the midsection to draw the base of the ribcage and the hips as close together as possible; the hip joints themselves should not move during the movement and are usually held at a 90-degree angle by putting the lower legs on a chair or bench with one's back on the floor.

# curl, biceps curl [pic]

## curl, reverse [pic]

A variation on the biceps curl in which the palms are kept facing downwards (pronated) throughout the movement, preventing the full contraction of the biceps and transferring more of the force onto the brachioradialis. Typically, you'll only be able to do two-thirds to three-quarters as much weight as you would be able to do in a standard biceps curl.

visibility of individual muscles and muscle heads. To be "cut," it should be easy to identify by sight the heads of the deltoid and dividing lines between the different heads of the quadriceps.

• compare ripped

# cutting, cutting up

to lose bodyfat, preferably with as little loss of muscle and other lean tissue as possible.

compare bulking

## cyclic Adenosine Monophosphate

important in the regulation of metabolic and neurologic processes and activity, cAMP is generated in response to the activation of cellular receptors and, in turn, the presence of cAMP within the cell activates the process in question. cAMP is broken down by cAMPphosphodiesterase.

The activity and duration of the process is governed by the rate at which cAMP is produced in response to receptor activation and the rate at which it is broken down. This is why the combination of ephedrine and caffeine produce a greater metabolic response than the sum of their effects when taken individually: ephedrine increseases receptor activation, caffiene inhibits cAMP breakdown.

# cyclic ketogenic diet, CKD

a ketogenic with the intentional addition of periodic "carb-ups" (as opposed to snapping and going berserk in a doughnut shop because you can't take it any more). The ketogenic periods typically last five days to a month or longer, carb-ups are usually only half a day to two days.

# cycling

In reference to drugs or supplements, a "cycle" is a dosage or usage regimen that lasts a finite period of time with a planned sequence of doses and times, which may or may not be the same.

# D

## [ 0-9 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z ]

## deadlift [pic]

an exercise performed by squatting down to pick up a barbell off the floor, standing up straight (or leaning back slightly), and then putting it back down. Simple, no?

• see the Misc.Fitness.Weights FAQ: What is the proper way to deadlift?

#### deadlift bar

a bar, usually but not necessarily straight, which is smooth in the center, but is knurled in the areas a lifter is likely to grip while performing a deadlift

• compare squat bar

## decline bench press

#### definition

visibility of the shape and detail of individual muscles as occurs in individuals with low bodyfat.

## deltoids, delts

the shoulder muscles, which are divided into three heads: anterior, medial, and posterior deoxyribonucleicacid (DNA)

the chemical, typically formed into chromosomes, that forms the chemical basis of genetics and heredity. Your DNA is what makes you a human (assuming that's what you are) and not a hamster (assuming you're not--it's hard to tell these things over the net)

## dextrose

See glucose

## DHT

see dihydrotestosterone

### diabetes

## dihydrotestosterone

a highly androgenic hormone produced from testosterone by the enzyme 5-alpha-reductase. This hormone is the primary culprit in male pattern baldness and benign prostate enlargement.

## dinitrophenol, 2,4-dinitrophenol, DNP [deja]

A potent nonselective uncoupler of oxidative phosphorylation that is not only effective

when ingested, but can also be absorbed through the skin. It is used industrially as a wood preservative, in the production of explosives, and as an ingredient in insecticides. It is extremely flammable or explosive when dry.

Its use as a weight loss aid dates back to the 1920's, but side effects such as lethargy, malaise, death, and bad breath soon caused the medical establishment to discontinue its use. Reintroduced to the public as a weight loss technique by the late Dan Duchaine, the small therapeutic range (the difference between the effective dose and the lethal dose) and serious side effects have continued to discourage its use.

• see also the Misc.Fitness.Weights FAQ: DNP

# dip belt [pic] [pic]

a belt, usually without a buckle, with a chain or other method of attaching a weight as a simple and comfortable way of adding weight when performing exercises involving lifting one's own body. A dip belt is most commonly used when performing <a href="dips">dips</a> (go figure!) and <a href="chin-ups">chin-ups</a>, though it can be an effective way of allowing the lifter to perform <a href="pull-downs">pull-downs</a> without lifting oneself up into the air during the movement.

## dips

## diuretic

a drug that increases the rate at which water is excreted through the kidneys

• see the Misc.Fitness.Weights FAQ: Diuretics

## **DNA**

see deoxyribonucleicacid

#### **DNP**

see dinitrophenol

## downregulation

• compare upregulation

### dumbbell

a short bar with fixed or changeable weights mounted on each end with enough space in between to grip with one hand.

the term "dumbbell" comes from the practice of demonstrating strength by lifting heavy cast metal bells (like the Liberty Bell, only smaller and not cracked). A "dumb bell" was a bell made without a clapper so that it would not ring through one's show of physical prowess. Eventually, any weight meant to be hefted with one hand was referred to as a "dumbbell" and after what we now think of as being a dumbbell shape became standard, the word "bar bell" or "barbell" was coined to refer to a similar weight with a central bar long enough to be held easily with two hands.

• compare barbell

# E

# [ <u>0-9 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z</u> ]

## ECA, ECA stack

Ephedrine, Caffeine, and Aspirin

• see also the Misc.Fitness.Weights FAQ: Ephedrine/ECA Stack

#### eccentric

done as the muscle extends or relaxes; "eccentric strength" is the weight that can be lowered under control

• compare concentric

## ectomorph

thin and linear body type

- compare endomorph
- and mesomorph

## **EFA**

see essential fatty acids

## electrolytes

minerals such as sodium, potassium, magnesium, and calcium used by cells in the creation and elimination of membrane potentials used to propagate nerve impulses and muscular contraction

#### endocrine

glands that produce chemicals released into the bloodstream. The pituitary and adrenal glands are endocrine glands; salivary glands and sweat glands are not.

## endomorph

rounded body type with small shoulders

- compare ectomorph
- and mesomorph

### enzyme

a protein catalyst; enzymes are involved in digestion and both the synthesis and breakdown of proteins, hormones, and other substances in the body

## ephedra

an herb, also known as Ma Huang and "Mormon Tea" containing ephedrine and pseudoephedrine

## ephedrine

a common beta agonist used to relieve the symptoms of asthma; it dilates bronchial passages and is also a stimulant

- compare pseudoephedrine
- see also the Misc.Fitness.Weights FAQ: Ephedrine/ECA Stack

# epinephrine

also known as adrenaline, epinephrine is a sympathomimetic hormone produced by the adrenal glands that accelerates heart rate, constricts blood vessels, raises blood pressure, dilates breathing passages, and accelerates the peristaltic motion of the muscles lining the intestines.

## epiphyseal plates

the "plate" on the end of a bone, particularly the long bones of the arm and leg which remain unfused to the rest of the bone during growth. Once they become fused, these bones cease to grow longer.

## ergogenic

tending to increase muscular power, endurance, or size

### essential amino acids

amino acids which cannot be synthesized by the body from other amino acids and, thus, must be present in the diet: leucine, isoleucine, lysine, methionine, phenylalanine, tryptophan, and valine

# essential fatty acids

unsaturated fatty acids which cannot be synthesized by the body and are used as the starting point for the biosynthesis of necessary metabolic and hormonal chemicals.

# estrogen, estrogenic [deja]

There is no one hormone named "estrogen"; estrogens are hormones that induce or accentuate female sexual characteristics (as well as performing other functions, depending on the specific hormone). Estrogens include estrone, progesterone, and estradiol. "estrogenic" means "tending to induce the same effects that estrogen does"; while chemicals that mimic testosterone are almost nonexistent in nature, our food supply, and our environment, estrogenic chemicals are common. Some of these, such as genestein (found in soy) have gotten considerable press coverage because they are weak estrogens, meaning that while they can occupy an estrogen receptor, they do not stimulate the receptor to as great an extent as the body's own estrogens would, which can reduce one's risk of estrogenrelated cancers and tumors, most notably breast cancer.

However, for this last effect to occur, the weak estrogens must be present in the body in sufficient quantity so that they displace existing natural estrogens that would otherwise stimulate available estrogen receptors--and the total degree of stimulation produced by the greater number of occupied receptors must be less than would have been produced by the naturally present estrogens alone.

Other estrogenic chemicals are found in plastics and pesticides and exert harmful developmental effects by disrupting the normal hormonal events that take place in humans and animals.

## exhaustion

#### extension

the act of straightening a joint

## extracellular

outside the cell or cells (in the bloodstream, lymph, etc.) as opposed to inside

• compare intracellular

# F

## [0-9 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z]

### farmer's walk

Grab a weight in each hand--dumbbells will work fine in you don't have a pair of large milk pails--and walk. Keep walking, carrying the weights until your hands, shoulders, or some other body part is crying for mercy. Then go a little further. Yeah, but a little further than that.

#### failure

#### fast-twitch muscle fibres

• compare slow-twitch muscle fibres

#### fat

digestible food components such as butter, lard, and oils composed of fatty acids. All kinds of fats provide nine <u>calories</u> per gram.

- compare protein
- and carbohydrate
- see also medium-chain triglycerides
- hydrogenated fats
- saturated fats
- unsaturated fats
- polyunsaturated fats
- monounsaturated fats

# fatigue, muscle fatigue

#### femur

the bone of the thigh

## fiber

an indigestible component of food, chemically classified as <u>carbohydrates</u> (and may be included in the total carbohydrate content listed on food labels), found primarily in unprocessed vegetables, nuts, grains, and fruits. Fiber does not provide <u>calories</u>, but offers significant health benefits as a component of the diet.

## fibre, muscle

### fibula

the smaller bone of the lower leg

## flax seed oil

an oil rich in <u>omega-3</u> polyunsaturated fatty acids; because of the high polyunsaturated fatty acid content, it should be kept refrigerated and even then has a limited shelf life.

• see the Misc.Fitness.Weights FAQ: Supplements:Flax seed oil

# flexibility flyes

an exercise targetting the pectoral muscles usually performed by lying face-up on a bench with arms almost straight (don't lock out your elbows, just keep the elbow joint at the same angle through the movement and move only the your shoulder joint) and a dumbbell in each hand. Raise the weights slowly until they are directly above your chest, lower them back out to the sides; repeat.

## forced rep

a forced rep is a repetition performed with assistance from a spotter after a lifter has reached the point of failure with a given weight.

• compare cheat rep

## free weight

equipment moved in the performance of an exercise which is simply raised and lowered as a complete unit. So called because the weight is free to move in any direction and in any manner the lifter can manage.

Free weights include barbells and dumbbells

• compare machine, weight machine

## french press

front raise [pic]

# front squat

squats done with the bar placed across the front of the shoulders rather than across the back. This concentrates the exercise more on the quadriceps and less on the back and glutes. Usually less weight can be lifted this way than when performing a conventional squat.

# G

## [ 0-9 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z ]

## Gaspari bar [pic]

A short weight bar with rotating handles mounted in-line with the bar so that they are free to rotate. Generally used for bicep curls, the Gaspari bar allows the lifter's hands to rotate freely

# gastrocnemius

the superficial (on top) head of the calf muscle which together with the soleus (the other head of the calf muscle) attaches to the heel through the achilles tendon and to the femur just above the knee joint.

• compare soleus

# German volume training, GVT [deja]

a training technique in which ten sets of ten reps are performed for each exercise. The same weight is used for each set and rest periods between sets are kept to a minimum.

## glucose

also known as dextrose, a simple sugar which is the main form of carbohydrate transported through the bloodstream to be used for fuel by cells.

# glutes, gluteus maximus

the large muscles of the buttocks that extend the hips exercises targeting the glutes include

- stiff-leg deadlifts
- deadlifts
- hyperextensions
- good mornings
- squats

# glycemic index [deja]

Glycemic Index (GI) is a rating system for carbohydrates that deals with how quickly the sugar enters the blood stream and the extent of the insulin response following that entry. GIs were initially established to help diabetics regulate insulin levels following meals. Those carb sources that have low GIs generally enter the blood stream slower or cause a smaller insulin response. This can be beneficial for those trying to lose fat as well as those who are diabetic.

• see the Misc.Fitness.Weights FAQ: what is the "glycemic index?

Rick Mendosa maintains an extensive list of the glycemic indices of foods at http://www.mendosa.com/gilists.htm.

## glycogen

a type of starch synthesized from glucose for intracellular storage. The primary glycogen stores are in the liver and in the muscles; liver glycogen stores will be broken down to glucose and released into the bloodstream when blood sugar levels are low, whereas this does not happen with muscle glycogen stores which will be used only to provide fuel for the muscles themselves.

Note that way that glycogen is stored in the body requires four grams of water to be stored for each gram of glycogen. The combined weight and volume of muscle glycogen stores accounts for a significant part of total muscular size. The depletion of these glycogen stores (and the release of the accompanying water) is what accounts for the rapid weight loss experienced in the first few days of ketogenic and other reduced-carbohydrate diets.

# good mornings gram

```
the metric unit of mass
```

```
28.35 \text{ grams} = 1 \text{ ounce}
      453 \text{ grams} = 1 \text{ pound}
 28.349 \text{ grams} = 1 \text{ ounce}
      1,000 \text{ mcg} = 1 \text{ mg}
1,000,000 \text{ mcg} = 1 \text{ gram}
       1,000 grams 1 kilogram
```

# grip [pic]

holding onto the bar (or other object); many exercises can be performed with multiple grip styles and the type of grip used will affect the amount of weight that can be used, the safety of the movement, and the muscles targeted.

a style of grip most commonly used in the bench press in which the thumb remains against the side of the palm rather than wrapping around the bar.

# grip, neutral [pic]

if your palms are facing towards each other you are using a neutral grip

# grip, pronated [pic]

look down at your hands; if your palms are facing away from you, you are using a pronated grip

• compare grip, supinated

## grip, reverse [pic]

a reverse grip is one in which the wrists are rotated in opposite directions (one pronated, the other supinated ). This is most commonly used for deadlifts because the tendency of the bar to roll out of the hands is cancelled out, allowing the lifter to hold more weight.

## grip, supinated

look down at your hands; if your palms are facing towards you, you are using a supinated grip

• compare grip, pronated

#### guarana

an herb containing significant amounts of caffeine

**GVT** 

see German volume training

# H

# [ 0-9 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z ]

## hack squat

## hammer curl [pic]

A variation on the <u>bicep curl</u> in which a <u>neutral grip</u> is used throughout the movement, which transfers more force onto the <u>brachioradialis</u> by reducing the leverage of the <u>biceps</u> at the top of the movement.

## hams, hamstrings

see biceps femoris

## head, muscle head

many muscles attach at a single point on one end and at multiple points at the other, somewhat like a bunch of bananas, but better at lifting big, heavy iron with.

"biceps" means two heads; "triceps," three; "quadriceps," four.

often the multiple heads of a single muscle will attach to different bones on either side of a joint. The <u>calf muscle</u> has two heads, which connect at the bottom and attach to the heel: the , the top of which attaches above the knee joint, and the <u>soleus</u> which attaches below. Because of this, if the knee is bent (such as when performing <u>seated calf extensions</u> the gastrocnemius is put in a poor position to transfer force and the exercise is performed largely by the soleus head.

# hGH, human growth hormone

• see the Misc.Fitness.Weights FAQ: Growth Hormone

### HIT

"High Intensity Training"

• see the Misc.Fitness.Weights FAQ: What is HIT?

#### **HMB**

see HydroxyMethylButyrate, HMB

# homeopathic [deja]

traditionally, a philosophy of therapy in which medical conditions are treated by preparing a solution of a substance which produces symptoms similar to those produced by the condition, diluting it until no molecules of the active ingredient remain in the solution, and then drinking it. The term is often applied to any solution so prepared, and irrespective of whether the homeopathic solution is intended to cure or cause a particular reaction, it is an expensive technique for consuming small quantities of water.

While it is not obvious why one would wish to do this, it does have the advantage of relatively few side effects.

hydrogenated fat

hydrolyze, hydrolyzation

hydrostatic

# HydroxyMethylButyrate, HMB

a metabolite of the branched-chain amino acid leucine, HMB is also available in supplement form. Some studies have shown increased growth in cattle given HMB, but evidence of any value for increasing human muscle growth and athletic performance is limited.

hyperextension, hyperextensions [pic]

of a joint, "hyperextension" refers to bending it beyond its normal range of motion (usually this is bad).

as an exercise, "hyperextensions" are performed using a roman chair which supports one's legs and hips in a horizontal, prone position. Either with or without a weight, one then bends at the hips, lowering one's head and shoulders until one's torso is close to vertical. Then, by contracting the glutes and spinal erectors, one raises one's torso back upwards to above the horizontal.

## hypertension

high blood pressure

# hypertrophy

# I

## [0-9 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z]

## Idiot of the Month

A special award bestowed by the readership of Misc. Fitness. Weights upon the writer who most fervently and persistently promotes or defends a claim the belief in which would normally be considered inconsistent with the level of mental functioning necessary to operate a computer.

see Misc.Fitness.Weights: the Idiot of the Month Award

## iliopsoas

impingement

incline bench press

#### insertion

The point of attachment of a muscle most distant from the body's midline or center.

• compare origin

#### insulin

a hormone that promotes the uptake of nutrients (most notably glucose,

• see the Misc.Fitness.Weights FAQ: Insulin

# insulin resistance

a reduced sensitivity to insulin, meaning that more insulin must be released to cause a given amount of nutrients uptake into the body's cells. Note that the downregulation of insulin sensitivity is likely to be more extreme in lean tissue than adipose tissue, so that persons who have developed a high degree of insulin resistance are likely to preferentially store nutrients as fat rather than use them for tissue growth and repair.

type-II (adult onset) diabetes is an extreme form of insulin resistance.

## insulin sensitivity

• see insulin resistance

# intensity

# **International Powerlifting Federation (IPF)**

An international governing body that oversees the rules and regulations of powerlifting competitions; IPF-sanctioned competitions and judging are overseen by national-level powerlifting associations that are affiliated with the IPF

• see the IPF homepage at http://www.ipf.com/

# **International Weightlifting Federation (IWF)**

An international governing body that oversees the rules and regulations of olympic lifting competitions

• see the IWF homepage at http://www.iwf.net/

### intracellular

inside the cell or cells as opposed to outside (in the bloodstream, lymph, etc.)

• compare extracellular

## **IOMO**

see Idiot of the Month

#### **IPFO**

see International Powerlifting Federation

## isolation, isolation movementO

an exercise that targets a single muscle or muscle group; usually the movement involves R flexing or extending only one joint.

<u>curls, Reg extensions</u>, and <u>flyes</u> are isolation movements, <u>lat pulldowns, Requats</u>, and <u>bench</u>R <u>presses</u> are not. R

• compare compound, compound movement

#### isomerO

a molecule with the same chemical composition (same number of atoms of each type) as R another, but with a different chemical structure (arrangement or configuration of those atoms). Two chemicals which are isomers of each other may produce effects on the body that are similar or completely different.

# isometricO

not involving contraction or extension; isometric exercises are done by tightening the muscles without moving any part of the body, such as by pushing against a brick wall instead of lifting a weight

## "The Isometric Diet"O

• see the Misc.Fitness.Weights FAQ: Diets:"The Isometric Diet"R

## **IWFO**

see International Weightlifting FederationR

# J

# [0-9ABCDEFGHIJKLMNOPQRSTUVWXYZ]

## jefferson squatsO

a variation on the <u>squat</u> which is performed with the bar held in the hands, usually using a <u>reverse grip</u> with one end of the bar in front of the lifter and the other behind. The movement is a lot like a <u>deadlift</u>, except that the bar is rotated close to ninety degrees and generally is not allowed to touch the floor at the bottom of the movement. R

# K(

## [0-9 A B C D E F G H I J K L M NO P Q R S T U V W X Y Z]

## **KcalO**

1000 calories, or one "food calorie" -

• see calorie-

ketogenic diet

ketonesO

kilogram, KgO

one kilogram = 2.2 pounds

## knee wrapsO

bands of fabric wound tightly around the knee during powerlifting to slightly increase lifting ability; their use should be avoided during general training (apart from right before a competition) since they can obstruct blood flow, compress nerves, and grind the kneecap against the front of the knee joint, resulting in inflammation and possible damage to the cartilage of the knee joint. R

## knurling, knurled

a groved or roughened area along the length of a bar to increase ease of gripping or to lessen the tendency to slip (this is why a <u>squat bar</u> is knurled in the center whereas a <u>deadlift bar</u> normally is not.

## Krebs cycle

a sequence of chemical reactions occuring within the <u>mitochondria</u> of living cells in which acetic acid (produced from foods) is oxidized to produce high-energy phosphate bonds (converting ADP to <u>ATP</u>) to be used to power the body's other metabolic processes. Also known as the <u>citric acid cycle</u>.

# L

# [0-9ABCDEFGHIJKLMNOPQRSTUVWXYZ]

## lat pulldowns

see pulldowns

#### lateral raise

An exercise for the <u>deltoids</u> performed by standing or sitting with the torso erect while holding a dumbbell in each hand. The weights are raised slowly out to the sides until they are at shoulder level and then slowly lowered (rather than allowing them to drop uncontrolled).

For the stress to be placed on the medial deltoid rather than the anterior, the palms must face downwards through the movement. Elbows should be kept rigid but slightly bent throughout the movement.

## lateral raise, bent [pic]

A variation on the <u>lateral raise</u> performed with the torso leaning forward almost parallel to the floor, shifting the stress primarily to the posterior deltoid. It can be done seated, standing, or on one knee, the palms should face downwards throughout the movement, and you should "squeeze" the posterior deltoids at the top of the movement.

## lats, latissimus dorsi [pic]

## **LBM**

see lean body mass

## lean body mass

total body mass minus fat mass; this includes muscle, bone, organs, water, etc.,--everything but fat.

## leg curls

leg extensions

lever arm

# ligament

a tough cord or band of dense white fibrous connective tissue that connects two or more body parts other than muscles such as providing support for an internal organ or holding the ends of two bones together at a joint.

• compare tendon

#### lipid

<u>fat</u> (usually when in the body rather than in food)

## low-carb, locarb

a genre of diet characterized by the reduction in <u>carbohydrate</u> intake, often but not necessarily to a <u>ketogenic</u> degree.

## lunges

# **M**(

# [0-9ABCDEFGHIJKLMNOPQRSTUVWXYZ]

# machine, weight machineO

equipment moved in the performance of an exercise which is not simply raised and lowered as a complete unit. Exercise machines may guide or restrict the direction and extent of a movement, use <a href="mailto:cams,Rever arms,Roulleys">cams,Rever arms,Roulleys</a>, or <a href="mailto:cables">cables</a> to redirect or alter the resistance, or generate the resistance through springs, hydraulic or pneumatic pistons, magnets, or elastic bands rather than weights. R

• compare free weightR

## macronutrientO

• compare micronutrientR

## ma huangO

see ephedra

# Manta Ray®O

a molded plastic accessory intended to increase comfort and stability of the bar during squats. One side is shaped to fit across the shoulders of the lifter and the other is designed to clip snugly around the bar.

# mcg or ugO

microgram -

• see gram-

## **MCT OilO**

## **Meal Replacement Powder**

instant milkshakes with added protein. some have added fats and sugars which you may or may not want. R

• see the Misc.Fitness.Weights FAQ: Supplements:Meal Replacement Powders

# medium chain triglycerides

#### medline

PubMed, the National Library of Medicine's free search service to access the 9 million citations in MEDLINE and Pre-MEDLINE (with links to participating on-line journals), R and other related databases.

www.ncbi.nlm.nih.gov/PubMed/

## mesomorphO

body type with thick muscles and heavy bone structure -

- compare ectomorph-
- and endomorph-

## metaboliteO

a chemical produced by the body from some other chemical such as a component of food, a supplement, or a drug.

#### mgO

milligram -

• see gram-

## micronutrientO

• compare macronutrientR

## military pressO

pressing either a <u>barbell</u> or <u>dumbbells</u> straight overheard from shoulder height to full arm extension with an erect torso. Performing this exercise while seated puts less strain on the lower back than if it is doen standing.

# military press machine Opic ]-

## mineral-

## mitochondria-

cellular organelles found outside the nucleus that provide energy for the rest of the cell by R

oxidizing nutrients to produce ATPR

## monounsaturated fats

### **MRPO**

see Meal Replacement PowderR

# N(

## [0-9 A B C D E F G H I J K L M NO P Q R S T U V W X Y Z ]

## negativesO

## non-steroidal anti-inflammatory, NSAID

an anti-inflammatory agent or drug that is not a steroid; NSAIDs include <u>aspirin</u>, ibuprofen, R naprosyn, and ketoprofen, but not <u>acetaminophen.R</u>

## **NSAIDO**

see non-steroidal anti-inflammatory

## nucleus, cell nucleusO

the main central <u>organelle</u> in the eukaryotic cell that contains <u>DNA</u> and directs the growth and activity of the cell. Most cells have exactly one nucleus, but <u>striated muscle cells</u> and some slime molds have multiple nuclei within a single cell, and red blood cells lose their nucleus before entering the blood stream (and are no longer able to divide) R

# [ 0-9 A B C D E F G H I J K L M NO P Q R S T U V W X Y Z ]

# oblique, abdominal oblique olympic plate Opic

lympic plates have 2" holes--actually 2-1/8" typically, to give them room to slip onto a 2" R diameter bar. There's some variation in size of the holes in the plates and in the diameter of the bar, depending on whether the manufacturer is thinking in ISO/standard units (2" diameter bar) or metric (5cm, a little smaller).

A lot of Olympic plates say "standard" on them. Ignore this, it's only the hole size that matters, no matter how many people try to convince you that "size doesn't matter." R

• compare standard plate

## olympic liftingO

weightlifting as traditionally performed in the Olympics involving the <u>clean and jerk</u> and the <u>snatch</u>; at one time the standing overhead press was included in this category, but it was removed decades ago.

## omega-3 polyunsaturated fatty acids

unsaturated fatty acids with the double bond at the third carbon position. Omega-3 fatty acids include alpha-linolenic (found in large quantities in <u>flax seed oil</u>) and eicosapentaenoic (EPA) and docosahexaenoic (DHA) acids (found in fish oils) R

• see the Misc.Fitness.Weights FAQ: Supplements:Omega-3 fatty acids

# one rep maximumO

## organelleO

any identifiable specialized part of a cell that is, to an individual cell, much like an organ like the heart or liver is to the body. Examples of organelles include <u>mitochondria</u> and the nucleusR

# originO

The point of attachment of a muscle closest to the body's midline or center. -

• compare insertion-

## **OTC**

see Over The Counter

overcompensation overloading, progressive overloading Over The Counter, OTC

sold without a prescription

## overtraining

Training beyond the body's ability to repair itself. This can be caused by training the same body parts too frequently so that the body does not have time to recover before the next workout; workouts that are consistently harder than the body is able to recover from fully; or impairment of the body's normal recovery ability due to nutritional deficiencies, illness, or stress.

Besides impairing athletic performance, overtraining can increase the risk of injury or disease. Symptoms of overtraining include fatague, reduced performance, and increased resting heart rate.

# P

## [ 0-9 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z ]

## patella

the kneecap

partials, partial reps

pec deck

pecs, pectoralis major

the two large muscles on the front of the chest

## peptide

a short chain of amino acids

# periodization

• see the Misc.Fitness.Weights FAQ: What is periodization?

# pinch grip [pic]

an exercise to increase grip strength typically performed by pinching two weight plates together (smooth side out) and picking them up using only the fingers

PNF, PNF stretching

polyunsaturated fats

potentate

to increase the effect(s) of, usually used in reference to the effects of a drug

pound

power cage

power clean

powerlifting

PR

Personal Record

## preacher bench [pic]

a "bench" somewhat like a very heavy-duty music stand turned away from the lifter with a padded, steeply inclined support for the backs of the lifter's arms and often (but not always) a seat behind. Placing the arms on a support like this prevents them from moving except at the elbow while performing curls.

## preacher curls

also known as Scott curls (after Larry Scott), a variation of <u>bicep curl</u> in which the back of the arm is supported, generally on a <u>preacher bench</u> and usually but not necessarily with the elbow placed forward of the shoulder.

## pre-exhaustion

to perform one or more <u>sets</u> of an <u>isolation movement</u> prior to the performance of a <u>compound movement</u>.

## prime mover

a muscle or group of muscles whose contraction produces the movement in an exercise

- compare <u>antagonist</u>
- stabilizer
- synergist

## prohormone

"Prohormones" are actually hormones themselves and are chemicals produced by the body (or close "chemical cousins" of such chemicals, as is the case with the nor- varieties). The "pro-" part is used for two reasons: first, because rather than themselves being the hormone one is actually interested in supplementing, they are instead used by the body's biochemical pathways to produce the hormone of interest; second, marketing.

• see the Misc.fitness.weights FAQ: Supplements:Prohormones

# prone, pronation, pronated

turning face-down or palm-down

• compare <u>supination</u>

## protein

digestible food components containing nitrogen composed of amino acids; protein is essential for tissue repair and growth and provides four calories per gram.

- compare carbohydrate
- and fat

## pseudoephedrine

an <u>isomer</u> of <u>ephedrine</u> that is a far weaker stimulant and bronchodilator and is used primarily as a decongestant.

It is not a suitable substitute for ephedrine in the ECA stack

## pubmed

see medline

```
pulldown machine [pic] [pic] pulldowns, lat pulldowns [pic] pulley
```

a freely rotating wheel used to change the direction of force applied by a <u>cable</u>. The <u>pulldown machine</u> typically has a cable passing over one or more pulleys at the top so that a downward force applied to the cable by the lifter raises the weights at the far end of the cable.

pullups pump, pumped pushdowns, tricep pushdowns pyramiding



## [0-9 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z]

## quads, quadriceps

the large muscle of the front of the thigh, composed of four heads: the vastus lateralis, vastus intermedius, vastus medialis, and rectus femoris. All of these join at a common tendon attached to the kneecap and all of them are involved in extending the knee joint. The rectus femoris attaches to the pelvic girdle (above the hip joint) rather than to the <u>femur</u> and in addition to extending the knee, it also flexes the hip.

exercises targeting this muscle include

- <u>leg extensions</u>R
- squats (any kind) R
- deadliftsR
- <u>lunges</u>R

# R(

## [0-9 A B C D E F G H I J K L M NO P Q R S T U V W X Y Z]

# range of motionO

receptorO

a chemical site either within the cell or on the surface of the cell membrane that responds to the presence of a chemical stimulus such as a hormone or neurotransmitter and triggers a series of chemical events that produce a response on a cellular level.

# recoveryO

## rep, repetitionO

a single complete performance of a movement, normally including both the <u>concentric</u>R (working against resistance) and <u>eccentric</u> (allowing the weight to move in the direction it would if you let go) phases, so that at the end of one rep, the weight and lifter are back in the position they were in prior to the rep. R

- see setsR
- the Misc.Fitness.Weights FAQ: How many repetitions should I perform?

# resistance trainingO

training with weights or other sources of resistance above and beyond the movement itself. Chin-ups are resistance training, jogging is not. R

restO

rest-pauseO

riboseO

ripped

visibility of fine detail below the level of individual muscles and muscle heads. To be "ripped," it should be easy to identify by sight the <u>striations</u> and muscle bands going across the heads of the deltoid, and the different heads of the quadriceps. R

• compare cutR

## roman chairO

## rotator cuff Opic

Four muscles (supraspinatus, infraspinatus, teres minor, and subscapularis) that run from the shoulder blade to the upper arm, or humerus which together stabilize the shoulder joint. R

• see <u>Your Rotator Cuff (and What Goes Wrong)</u> from The 7-Minute Rotator Cuff R Solution R

routineO rowO

SI

# [0-9 A B C D E F G H I J K L M NO P Q R S T U V W X Y Z ]

### saturated fats

<u>fats</u> comprised of fatty acids in which all possible bond positions along the carbon backbone are filled with hydrogens. Saturated fats are solid at room temperature, stable at high temperatures, and have long shelf-lives. While this makes them excellent for frying, R

especially deep frying, they have no nutritional or metabolic functions beyond providing calories.

- compare
- hydrogenated fats
- unsaturated fats
- polyunsaturated fats
- monounsaturated fats

#### Scott curl

see preacher curl

## serratus anterior

the muscle underneath and slightly forward of the armpit that gives this area a ridged appearance; if you can't find this muscle, your bodyfat percentage may be up into double digits.

#### set

a sequence of one or more complete performances of a movement, or <u>rep</u> done as a unit with minimal or no pause in between. When you pick up a barbell, curl it ten times, and then put it down, that is one set of ten reps.

- see rep
- the Misc.Fitness.Weights FAQ: How many sets should I do per exercise?

## shrugs

an exercise for the <u>trapezius</u> performed by standing upright while holding a weight in both hands and lifting the shoulders up and down while the arms remain hanging downwards.

• see the Misc. Fitness. Weights FAQ: What is the proper way to do shrugs?

# sissy squat situps, sit ups six pack

Defined abdominal muscles, so called because six bulges are visible (three per side) through the skin. The level of bodyfat necessary to see all six varies between individuals and the lower ones usually require the lowest bodyfat levels to bring them out (so, if you have a little too much abdominal fat left, you might have a "four pack" with just the upper four showing.

• see the Misc.Fitness.Weights FAQ: How do I get a six-pack?

### skullcrushers

<u>tricep</u> extensions typically performed while lying on a bench with the upper arms vertical. Grip a barbell in your hands with a <u>pronated grip</u> and arms straight upwards. Bending only your elbows, lower the weight towards the bridge of your nose, then push back to the starting position.

## slow-twitch muscle fibres

• compare <u>fast-twitch muscle fibres</u>

## smith machine

## smooth muscle

muscle tissue lacking the alternating dark and light bands that characterize <u>striated muscle</u>, composed of spindle-shaped cells with containing a single <u>nucleus</u>. Also known as "involuntary muscles" because their contraction and relaxation is not under direct voluntary control. Smooth muscle tissue lines the arteries, intestines, and is generally not attached to bones or ligaments.

• compare striated muscle

# snatch

soleus

the underlying head of the <u>calf muscle</u> which together with the <u>gastrocnemius</u> (the other head of the calf muscle) attaches to the heel through the <u>achilles tendon</u> and to the <u>tibia</u> and <u>fibula</u> just below the knee joint.

• compare gastrocnemius

## spinal erectors, erector spinae

paired muscles on either side of the spine in the lower back whose function is to straighten the spine

## spot, spotter, spotting

to "spot" is to provide assistance to another lifter or at least to stand by ready to do so if needed. A spotter for the <u>bench press</u> normally stands behind the lifter and, should the lifter need assistance in raising the weight, touches or grasps the bar and helps lift it upwards.

## squat

the "king of exercises"; put a bar across your shoulders while you are in a standing position and, keeping your torso as upright as possible, squat down until the tops of your thighs are parallel to the floor or below.

variations on the squat include:

- box squat
- front squat
- hack squat
- jefferson squat
- sissy squat
- see the Misc.Fitness.Weights FAQ: What is the proper way to squat?

# squat bar

a straight bar with <u>knurling</u> in both the center and sides to make it easier to grip and less likely to slip when placed across the back (or at least take more flesh with it if it does slip)

• compare deadlift bar

## squat cage

## squat rack

## squat suit

a very tight, usually neoprene bodysuit worn theoretically for protection, but in reality because it increases the amount of weight that can be lifted by compressing and applying a straightening force to the legs and hips.

## stabilizer

muscles that assist in the performance of an exercise by steadying the joint or limb being moved, but not increasing the force being applied.

One of the disadvantages of using <u>machines</u> rather than <u>free weights</u> for training is that many machines take over the task of stabilizing the movement, so that the stabilizing muscles are not trained to nearly the extent that they would have been with free weights.

• compare <u>synergist</u>

## stack, weight [pic]

a pile of weight plates drilled so that they can slide vertically on poles, most often two fixed solid rods and one moveable rod with a series of holes along its length, with a horizonal hole or gap in each plate such that a pin may be inserted through the hole or gap in the plate and into a matching hole in the moveable rod. This weight and all those above it may then be lifted by the moveable rod, which is typically attached to a cable or lever arm.

# stack, supplement or drug stance

foot and leg position during the performance of an exercise, particularly <u>squats</u> and <u>deadlifts</u>. This can make a great difference in the movement and the muscles targeted. For example, a wide stance in the squat allows for a more upright torso and tends to place more stress on the <u>glutes</u> and <u>thigh adductors</u>, while a narrower stance tends to shift stress more to the <u>quads</u> and lower back.

## standard plate

a weight plate designed to be mounted on a one-inch diameter bar. Usually round with a central hole of about 1-1/8", they are commonly available in 1-1/4, 2-1/2, 5, 10, 25, and 50 pound sizes. Many olympic plates have "standard" written on them, but it's the size of the hole that matters.

• compare olympic plateR

### steroidO

• see the Misc.Fitness.Weights FAQ: Steroids

# stiff-leg deadlift

# striated muscle

muscle tissue composed of <u>multinucleate</u> cells with alternating dark and light bands. Also known as "voluntary muscles" because their contraction and relaxation can be controlled voluntarily. R

• compare smooth muscleR

#### striationsO

fine grooves or bands on the surface of a muscle, visible through the skin in <u>ripped</u> bodybuilders.

# strippingO

having one or more spotters remove weights from the bar during a <u>set</u> so that the lifter can R continue with a lighter weight after having reached <u>failureR</u>

• compare working down the rack

## sublingualO

absorbed into the bloodstream through the skin under the tongue, an area with especially thin skin and a rich blood supply. Bypasses the liver and the rest of the digestive system and exposure to all the acids and enzymes involved. R

see also -

• transdermal-

## sugarO

Either a generic term for a short-chain <u>carbohydrate</u> or a specific term for sucrose (table R sugar). Monosaccharide sugars (simple sugars) include fructose (fruit sugar), glucose (dextrose, grape sugar, corn sugar), galactose. Disaccharide sugars (sugars made from two monosaccharides bonded together) include sucrose (table sugar, cane sugar, or beet sugar), maltose, lactose (milk sugar). R

Sugar content in 100grams of some common beveragesR										
Food	monosaccharidesR			disaccharidesR				totalR	%R	
ItemR	Glucose	Fructose	Galactose	Sucrose	Lactose	Maltose	sorbitol	sugars	glucose	frı
AppleR	2.3R	6.0R		2.5R			0.5R	11.3R	31R	64
ColaR	4.0R	4.4R		2.1R		0.1R		10.6R	48R	52
GrapeR	6.7R	6.5R						13.2R	51R	49
Skim R MilkR					4.4R			4.4R	-R	-
OrangeR	3.1R	1.9R		4.2R		0.8R		10.0R	60R	40
PeachR	1.0R	1.1R		6.0R			0.9R	9.0R	44R	46
PearR	1.7R	6.6R		1.7R			2.1R	12.1R	21R	62
Pineapple	2.3R	1.4R		4.7R			0.8R	9.2R	51R	41
PruneR	23.0R	14.0R		0.6R			12.7R	49.3R	47R	29

<sup>\*</sup> note that % glucose and % fructose values include the glucose and fructose fractions of disaccharides sucrose (one fructose molecule and one glucose molecule bonded together) and maltose (two glucose molecules bonded together)R

## **SuperSlowO**

SuperSlow is an exercise protocol whereby the weight is lifted in approximately 10 seconds R

and lowered in five seconds. It can be used with any kind of resistance equipment: free weights, Nautilus or other machines, or calisthenics (dry land) exercises.

• see the SuperSlow Exercise Guild Website

# sumo-style deadlift

# supine, supination, supinated

turning face-up or palm-up

• compare <u>pronation</u>

## swiss ball

## synergism, synergistic

a combination of different components or elements which produce a result greater than the sum of the effects that would have been produced by each one separately.

# synergist

muscles that assist in the performance of an exercise by adding to the force required to execute the movement

• compare stabilizer

# T

# [0-9ABCDEFGHIJKLMNOPQRSTUVWXYZ]

# t-bar row [pic]

## tapering off

reducing quantities taken of a drug or supplement at the end of a cycle

# targeted ketogenic diet, TKD

## tendon

a tough cord or band of dense white fibrous connective tissue that connects a muscle with another body part (such as a bone) and transmits the force produced by the construction of the muscle to produce movement in the body part in question or to use that part as an "anchor" from which to induce movement in another part of the body.

• compare ligament

## testosterone

the primary natural androgenic and anabolic steroid hormone found in the body

## thermogenesis, thermogenic

The generation of heat, usually through biological processes. Thermogenic drugs, such as <a href="mailto:ephedrine">ephedrine</a> and <a href="mailto:caffeine">caffeine</a> increase the rate at which the body produces heat internally, generally through the mechanisms used to maintain body temperature.

## tibia

the larger bone of the shin (lower leg)

## **TKD**

see targeted ketogenic diet

## topical

applied to the surface of the skin

## training, styles of

#### see also

- German Volume Training (GVT)
- High Intensity Training, HIT
- periodization

### transdermal

"through the skin," as in transdermally-delivered drugs such as <u>testosterone</u> and <u>estrogen</u> patches. Transdermal delivery allows chemicals that would be broken down by the digestive system or destroyed by the liver to pass into the bloodstream. It also can provide a slow and

steady level of the chemical rather than a sudden "pulse" when hitting the digestive system.

see also

• sublingual

## trans-fatty acids

unsaturated fatty acids that have a "z" shape caused by unsaturated bonds being on alternate sides of the molecule. Naturally formed unsaturated fatty acids are normally in the "cis" configuration, with the unsaturated bonds on the same side of the carbon chain. The transconfiguration is typically produced by the partial hydrogenation of polyunsaturated fatty acids which is done to increase shelf life, heat stability, and thickness.

# Trap Bar, Gerard Trap Bar [pic]

A weight bar with a diamond-shaped section in the middle, typically used for deadlifts and shrugs. During the exercise, the lifter stands inside the diamond and grips the transverse handholds on either side of the diamond.

Everything you'd ever want to know about the trap bar can be found at http://www.trapbar.com/

compare

cambered bar

## trapezius, traps [pic]

a kite-shaped muscle of the back with the points of the "kite" at the base of the skull, the shoulders, and the center of the lower back. The trapezius is primarily visible as the pair of bulges on either side of the neck.

exercises for the trapezius include

- shrugs and
- upright rows

## triceps

three-headed muscle (hence "tri-") forming the bulk of the back of the arm. Its function is to extend the elbow. Most pushing exercises, including the bench press and military press involve the triceps extensively, especially at the top of the movement exercises specifically targeting the triceps include

- french press and
- tricep pushdowns

#### triglyceride

chemical name for fat, usually used when referring to fats in the bloodstream rather than in food. The name comes from the three fatty acid chains that together with the glycerol "backbone" make up the molecule.



## [ 0-9 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z ]

# ug or mcg

microgram

• see gram

## unsaturated fats

fats containing fatty acids with some carbon-carbon double bonds. Saturated fats have all possible positions that could be occupied by a hydrogen atom filled, leaving no double bonds in the carbon chain.

# upregulation

• compare downregulation

upright rowsO uptakeO



## [0-9 A B C D E F G H I J K L M NO P Q R S T U V W X Y Z]

vanadyl, vanadium vascularityO visibility of veins R vitaminO volume, training volumeO



# [0-9 A B C D E F G H I J K L M NO P Q R S T U V W X Y Z]

warm-upO
wash-board abs
see six packR
weight classO
Weider, Ben
Weider, Joe
"Weider Principles"

Einstein may have been unsuccessful in his attempts to create a unified field theory, but this has done nothing to discourage Joe Weider in his campaign to unify the field of weightlifting and bodybuilding by naming any and all practices and techniques "The Weider [X] Principle" where [X] stands for, well, pretty much anything. If you aren't following any recognizable training style and just do whatever comes to mind, you can rest assured that you are actually following the "Weider Instinctive Training Principle" or perhaps the "Weider Muscle Confusion Principle," depending on whether you're at all consistent about it from one workout to another. R

## Wilks FormulaO

Named after Robert Wilks, a formula used to determine the best lifter or lift of powerlifters of different body weights.

Tables of Wilks Formula coefficients may be found at these websites R

- in Kilograms: <a href="www.ipf.com/formula.htm">www.ipf.com/formula.htm</a>R
- in Pounds: www.isu.edu/~andesean/FINWIL.txt

# working "down the rack"

using a sequence of <u>dumbbells</u> or (less commonly) <u>barbells</u> with decreasing weights, a lifter performs an exercise to <u>failure</u> with one weight and then immediately switches to the next ligher weight. By the time you have completed working "down the rack," you may not be able to lift your arms, straighten them completely, or you may simply be shaking from the R kind of agonizing pain that tells you, "wow, that was a good workout!" R

• compare strippingR



[0-9 A B C D E F G H I J K L M NO P Q R S T U V W X Y Z ]

# Y(

# $[\ \underline{0-9}\ \underline{A}\ \underline{B}\ \underline{C}\ \underline{D}\ \underline{E}\ \underline{F}\ \underline{G}\ \underline{H}\ \underline{I}\ \underline{J}\ \underline{K}\ \underline{L}\ \underline{M}\ \underline{NO}\ \underline{P}\ \underline{Q}\ \underline{R}\ \underline{S}\ \underline{T}\ \underline{U}\ \underline{V}\ \underline{W}\ \underline{X}\ \underline{Y}\ \underline{Z}\ ]$

# Yohimbe, yohimbineO

• see the Misc.Fitness.Weights FAQ: Supplements: YohimbeR

# Z

# [ 0-9 A B C D E F G H I J K L M NO P Q R S T U V W X Y Z ]

# "The Zone"O

• see the Misc.Fitness.Weights FAQ: Diets:"The Zone"R

