

TRAINING CONSIDERATION WHILE SELECTING NATURE OF EXERCISE AND UNDERSTANDING SUITABILITY AND FORMS OF EXERCISE.

INTRODUCTION

Training is teaching, or developing in oneself or others, any skills and knowledge that relate to specific useful competencies. Training has specific goals of improving one's capability, capacity, productivity and performance. It forms the core of apprenticeships and provides the backbone of content at institutes of technology (also known as technical colleges or polytechnics). In addition to the basic training required for a trade, occupation or profession, observers of the labour-market recognize as of 2008 the need to continue training beyond initial qualifications: to maintain, upgrade and update skills throughout working life. People within many professions and occupations may refer to this sort of training as professional development. Physical training concentrates on mechanistic goals: training programs in this area develop specific skills or muscles, often with a view of peaking at a particular time. Some physical training programs focus on raising overall physical fitness. In military use, training means gaining the physical ability to perform and survive in combat, and learning the many skills needed in the time of war. These include how to use variety of weapons, outdoor survival skills, and how to survive being captured by the enemy, among many others like in military education and training. For psychological or physiological reasons, people who believe it may be beneficial to them can choose to practice relaxation training, or autogenic training, in an attempt to increase their ability to relax or deal with stress. While some studies have indicated relaxation training is useful for some medical conditions, autogenic training has limited results or has been the result of few studies.

SELECTING NATURE OF EXERCISE

Proper exercise selection can be tough. There are countless lifts to choose from and most of them have several similar-but-different variations. Fortunately, there is a set of objective criteria to qualitatively rate exercises, which allows for making the most effective choice between any groups of exercises with the same purpose – like figuring out why an overhead extension is a better choice for triceps than a press down. Let's take a look at exactly what these

principles cover and learn how to apply them to several basic exercises. Here, some of the principles of exercise selections are discussed below:

The Limit Factor

An exercise is most effective for a body part if that body part is a limiting factor in the execution of the exercise, overlooking the other criteria. If the grip always gives out first on dead lifts, then the posterior chain will remain under stimulated and dead lifts end up being a poor choice for training the lower body. Similarly, the lower chest and the long head of the triceps are active movers during a pull-up, but they will never limit the performance in the lift, so pull-ups are not seen as an effective exercise for these body parts.

This criterion removes almost all unstable exercises from the bodybuilder's exercise menu. Standing on an unstable surface will make the balance or, at best, the muscles in feet the limiting factor in the exercise.

Compoundness

For any selection of body parts, a compound exercise is superior to more isolated exercises, provided the compound exercise fulfills the other criteria for said body parts. Compound exercises are more than a sum of their isolation exercise parts, which is why the guy with the bigger bench press will be more impressive than the guy focusing on fly's and skull crushers. Compound exercises also allow the body to spread the external force over multiple joints, which is beneficial for joint health and strength. Basically, they are a more natural way to move the body and they lend themselves to meeting the other exercise criteria better than isolation exercises alone. That is not to say isolation exercises are useless. They absolutely have their place, but they can never rival compound exercises and should never be prioritized over them when it comes to getting big or strong. You can certainly include curls in the program, but only if the program already contains compound pulling exercises.

Range of Motion

The more an exercise moves joints through their full range of motion, the better it is overlooking the other criteria. It has been empirically demonstrated, time and time again, that lifting with a full range of motion (ROM) is superior to partial ROM for building strength. Using full ROM increases the mobility for that movement pattern and does so more effectively than basic stretching. Increasing the ROM also increases the compoundness of the exercise. Partial

squats are only somewhat effective for training the quads and maybe the spinal erectors, but full squats effectively involve the entire posterior chain. Lastly, training with a full ROM is easier on the nervous system and the joints because lighter loads can be used. We all know that, ideally, the bar should touch the chest when we bench press and shallow quarter squats are only done by frat kids in between sets of curls, but few people realize that the ROM principle is actually applicable for all exercises.

Tissue Stress Distribution

The more an exercise's stress is applied to its targeted structures, and the less stress is applied to peripheral tissue, the better the exercise, overlooking the other criteria. Targeted exercises should stimulate the muscles maximally and target other tissues, like tendons, only insofar as their adaptations are required for maximum muscle growth. Factors like bone density, tendon strength, and cardiovascular health tend to take care of themselves if we do high-intensity compound exercises, so we don't need to worry about actively strengthening anything other than the muscles.

Dynamic Contraction

Exercises that consist of an eccentric and a concentric portion are superior to exercises that are purely isometric, concentric, or eccentric, overlooking the other criteria. Long-term studies that measure increases in cross-sectional area consistently support this concept. Contrary to popular belief, the hierarchy of muscle building is eccentric-concentric contractions, followed by isometric contractions, followed by concentric contractions, followed lastly by eccentric contractions. As usual with the fitness industry, empirical data falsifies most theories. It is strongest on the concentric when it is immediately preceded by the eccentric phase of a movement. That is how we naturally jump, kick in doors, and throw heavy objects at people doing curls in the squat rack. It is the most effective way to do most exercises, too.

Strength Curve or Resistance Curve

The closer the resistance curve of an exercise approximates a healthy trainee's strength curve, the better the exercise, overlooking the other criteria. If an exercise's strength and resistance curves don't match, some muscles involved in the lift will remain under stimulated. We know how we usually fail exercises at the same point. Ideally, that point should not exist and muscle failure should only occur at points where the underdeveloped body parts can no longer apply enough force. That way, the exercise would allow us to develop all the muscles used in the

lift in a perfectly, structurally-balanced manner. Exercises that satisfy this criterion would automatically balance us out, because, in the case of the dead lift, the gluteus would receive a greater training effect than the other muscles used. The resistance curve for many exercises is flat, meaning, there is a constant resistance. The weights do not change mass and gravitational acceleration is constant, unless we are training on a space station in orbit. Exercises that require the weight to move vertically (directly opposed to gravity's line of pull) have a constant resistance curve.

Micro-loadability

The more precisely an exercise's resistance can be determined, the better the exercise, overlooking the other criteria. The best mass-building exercises lend themselves both to high absolute loads and small incremental loads. Ideally, we want to choose exercises that allow us to increase the maximum weights used, but we need the ability to take baby steps towards those maxes. Absolute, or maximum, load is generally a limiting factor in bodyweight exercises. Handstand push-ups, for example, are superior to overhead presses with respect to their kinetic chain (closed vs. open), but they are far worse than overhead presses with respect to their absolute loading.

Still, dead lifts are not even ideal for these muscle groups because they are both slow-twitch dominant and require relatively-high volume for optimal growth, but working dead lifts with such a high volume will leave the nervous system fried and extra crispy, like everyone's favorite breakfast side dish. However, this is not to say that all dead lift variations are bad for bodybuilders. Romanian dead lifts, for example, remain a good exercise.

Understanding and forms of exercise for fitness

Some of the most effective exercises are highlighted below:

Walking

Any exercise program should include cardiovascular exercise, which strengthens the heart and burns calories. And walking is something we can do anywhere, anytime, with no equipment other than a good pair of shoes. Doing a brisk walk can burn up to 500 calories per hour. Do not start from the sofa to walking an hour day, though, beginners should start by walking 5 to -10 minutes at a time, gradually moving up to at least 30 minutes per session.

Interval training

Whether we are a beginner or an exercise veteran, a walker or an aerobic dancer, adding interval training to the cardiovascular workout will boost the fitness level and help us to lose weight. The way to do it is to push the intensity or pace for a minute or two, then back off for anywhere from 2 to -10 minutes (depending on how long the total workout will be, and how much time we need to recover). Continue doing this throughout the workout.

Squats

Strength training is essential for an exercise programme. The more muscular fitness we have the greater the capacity we have to burn calories. And experts tended to favor strength-training exercises that target multiple muscle groups. Squats, which work the quadriceps, hamstrings, and gluteals, are an excellent example. For perfect form, keep feet shoulder-width apart and back straight. Bend knees and lower the rear. The knee should remain over the ankle as much as possible.

Push-ups

If done correctly, the push-up can strengthen the chest, shoulders, triceps, and even the core trunk muscles, all at one time. Here is how to do a perfect push-up: From a face-down position, place the hands slightly wider than shoulder-width apart. Place the toes or knees on the floor, and try to create a perfect diagonal with the body, from the shoulders to the knees or feet. Keep the glutes and abdominals engaged. Then lower and lift the body by bending and straightening the elbows, keeping the torso stable throughout.

Abdominal Crunches

For a standard crunch, begin lying on the back with feet flat on the floor and fingertips supporting the head. Press the low back down and begin the exercise by contracting abdominals and peeling first the head (i.e. tucking the chin slightly), then the neck, shoulders, and upper back off the floor. Be careful not to pull the neck forward by sticking the chin out; do not hold the breath, and keep elbows out of the line of vision to keep chest and shoulders open. To work the obliques (i.e. the muscles on the sides of the waist), take the standard crunch and rotate the spine toward one side as we curl off the floor. Twist *before* we come up. It is really important that the twist comes first because then it is the obliques that are actually getting us up. But keep in mind

that we will not get a flat stomach with crunches alone. Burning belly fat requires the well-known formula i.e. using up more calories than we take in.

Bent-over Row

Talk about bang for the buck: This exercise works all the major muscles of the upper back, as well as the biceps. Here is how to do it with good form. Stand with feet shoulder-width apart, then bend knees and flex forward at the hips. Tilt the pelvis slightly forward, engage the abdominals, and extend the upper spine to add support. Hold dumbbells or barbell beneath the shoulders with hands about shoulder-width apart. Flex the elbows, and lift both hands toward the sides of the body. Pause, then slowly lower hands to the starting position.

These above mentioned exercises are excellent, efficient choices. But with just about any strength or resistance exercise, the question is not so much whether the exercise works as how well we execute.

CONCLUSION

Training is teaching, or developing in oneself or others, any skills and knowledge that relate to specific useful competencies. Training has specific goals of improving one's capability, capacity, productivity and performance. Physical training concentrates on mechanistic goals: training programs in this area develop specific skills or muscles, often with a view of peaking at a particular time. Some of the physical training programs focus on raising overall physical fitness. Thus, understanding the forms of exercise for fitness is a very important aspect of training and various exercise programmes for consideration while selecting nature of exercises.