

The effect of third intensity zone exercises by varying the muscle elongation of the muscles of the dominant arm and the supporting leg on some physiological indicators and the performance of pushing the weight

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Abstract

The research aimed to prepare exercises for the third intensity area with the variation of muscle elongation of the prevailing arm muscles and the supporting leg of the weight push players, and to identify the effect of the exercises of the third intensity area by contrasting the muscle elongation of the dominant arm muscles and the supporting leg in some physiological indicators and the achievement of weight pushing, and the researcher assumed that there are statistically significant differences between the results of the pre- and post-tests for the top and the time of the signal (EMG) for each of the dominant arm muscles and the supporting leg (brachial, radial brachial of the dominant arm, and rectilinear femurs). anterior, and twin leg) at the moment of the start of the rotation phase to push the weight of the players of the experimental group, and there are statistically significant differences between the results of the pre- and post-tests to accomplish the weight push distance for the players of the experimental group, the experimental research approach was adopted by designing one experimental group with tight control of the pre- and post-tests, The limits of the research community were represented by the young players in the hammer throwing event in the Etisalat Club, who numbered (9) players for the sports season (2023/2024), all of whom were deliberately selected for the research sample by (100%) from their original community in a comprehensive inventory method to represent the experimental research group, and to measure the electrical indicators of both the dominant arm muscles and the supporting leg (brachial, radial brachial of the dominant arm, anterior femoral rectum, and leg twin) The moment the rotation phase begins to push the weight The researcher adopted the (EMG) device and to measure the achievement the test was adopted Completion of the hammer throwing event in accordance with the conditions of competition in the international law of the Athletics Federation according to its international bulletin for the year (2018), and the exercises were prepared and applied with a field experiment that began with the application of the pre-tests on (16/11/2023), and then the application of these exercises for the period from (19/11/2023) to (11/1/2024), and the completion of the experiment by applying the post-tests on (14/1/2024), then the results were processed with

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the (SPSS) system. Extracts and applications are formed by the fact that the third severity area exercises help with the contrast of the muscular elongation of the prevailing arm muscles and the supporting man in increasing the summit of the EMG sign and reducing its time for both the prevailing arm muscles and the supporting man (the humerus, and the Hebrew muscles of the prevailing arm, the front thighs, and the twins of the leg) in the players The moment of the start of the rotation stage to push the weight, and helps in the development of the distance of the completion of the heavy -paying the players, and it is necessary to pay attention to the coaches of the heaviness in the physiological measurement by measuring the (EMG) signals for the prevailing arm muscles and the man who supported the players to pay the weight and plan and apply the exercises according to the physiological characteristics by adopting the results of this measurement, It is necessary not to exaggerate the training loads or how much muscular elongation resistors to reduce the problem of decreasing the speed of muscle rubble in the event of an increase in the amount of these resistors.

Keywords: the third severity area exercises, muscle elongation, physiological indicators, completion of the payment of weight.

Introduction

“Sports training in various athletics activities must be closely linked to the movements in the skill, so the physical abilities associated with basic skills must be developed by designing special training programs for each sporting activity.(Yasir et al., 2020) This means that the training program must focus on the muscles working in performance ”. same) .”Petersen & Other, 2002, P:212)

Thus“ ,third intensity zone exercises are a concept often used in physical exercise programs, and they mean exercises that target strength characterized by speed.(Idrees et al., 2022) These exercises include many fast and powerful movements that aim to improve rapid muscle strength and the ability to perform sudden and powerful movements efficiently .”.)Negra & Other, 2020, P: 132)

Also“ ,the third intensity zone works to develop a variety of physical abilities, including rapid muscle strength, and helps Exercises that focus on the third intensity in developing rapid muscle strength, which is the ability to produce great force in a short time, is useful in various sporting activities) ”.Ramirez-Campillo & Other, 2020, P: 168)

It is also“ very important that these exercises are performed correctly and under the supervision of a specialized trainer to avoid injuries and ensure that you get the most benefit from them. These exercises must also be included as part of a balanced training program that targets all aspects) ”.Baker, 2017, P: 3)

Since“ Third intensity zone exercises enhance the ability to jump and run very quickly, and are especially important in sports that require rapid acceleration, such as athletics and team sports) ”.Chaabene & Other, 2021, P:301)

Also“ ,among the distinctive exercises in the third intensity zone include exercises that combine strength and speed, such as throwing and tossing quickly and repeatedly) ”.Bompa &Haff, 2018, P: 33)

Thus, muscular strength takes precedence over the rest of the important factors in achieving the best achievement for a weight thrower, as muscular strength is defined as“ the ability to overcome or confront external resistance.(Nashwan, 2024) It is also defined as the

maximum amount of force that a muscle can perform in a single maximum muscle contraction. There are three types of muscular strength: With maximum strength, strength characterized by speed, and endurance of strength) ”.Ahmed, 2019, pp. 263-264)

It is also known as“ the basic element for achieving achievement in most physical and sporting activities. With regard to the term (job), (Khedir, 2018) it is the individual’s specific tasks that are assigned to him, whether he is an athlete or a non-athlete, as all of these tasks require many abilities to perform) ”.Manaf, 2017, p. 43)

As“ ability is greater if the force is used over a relatively long distance or if the force is used over a short period of time or both together, sports games depend more on ability than on force) ”.Marwan and Ibrahim, 2004, p. 106)

Also“ ,muscular elongation is an important characteristic in activities that require a wide range of motion to perform sports skills, and the availability of this characteristic guarantees the great success of skill performance) ”.Muhammad, 2008, p. 573)

Also“ ,Muscular strength plays the main role in improving performance and preventing sports injuries? Not long ago, the information was available that muscular strength was of great importance and was considered the basic rule and an important requirement for almost all sports, (Mondher et al., 2023) but in recent years we can notice that muscular strength is definitely important ”.But combine it with speed and it becomes explosive power and it will certainly be more important) ”.Bompa & Michael,2005, P: 195)

“The elasticity or elongation of a muscle is determined by the connective tissue that is formed from the sheaths of the skeletal muscle fibers in the muscle rather than by the proteins of these fibers themselves) ”.Joseph & Kathleen, 2009, P: 66

Also“ ,no matter how diverse the methods and methods for developing muscle strength are, the required improvements fall within the determinants of good planning for the application of these methods and methods, which often focus on plyometric and ballistic exercises in cycles of lengthening and shortening the muscle for rapid, high-production contraction in the effect of the force resulting from it) ”.Goldberger, 2013, P:258)

“The factors affecting the production of muscle force are determined by the number of muscle fibers stimulated, the cross-section of the muscle or muscles participating in the performance, the composition of the muscle fibers, (Mahmood & Kadhim, 2023) the angle of muscle force production, the length and relaxation of the muscle or muscles before contraction, the length of time spent in muscle contraction, and the degree of compatibility. The muscles involved in the performance, the player’s emotional state before and during the production of muscle force, age, gender, and warm-up) ”.Maad et al., 2010)

“It is believed that muscular contraction exercises improve muscle fiber coordination and utilize the energy storage and release mechanisms in the muscles, leading to increased explosive capacity of the muscles) ”.LARKIN & O’LEARY, 2017, P: 88)‘

And in explosive strength and speed strength training, trainers work to bring the muscles to their maximum ability to elongate, (Mousa & Kadhim, 2023) in accordance with the physical law of (extension) concerned with (stretch and force generation), the application of which is that the more a muscle elongates after shortening, the more it is able to produce greater muscular capacity) ”.Ayed, 2009, p. 36)

As for“ the strength of the arm to push the weight, it is the force that the athlete uses to push the ball or weight in athletics. This movement is part of the sport of discus throwing and javelin throwing, where the athlete lengthens his arm and then pushes the ball or weight with the greatest possible force through the air. The weight-pushing arm depends on muscle

strength and the correct movement technique. The athlete must develop the muscle strength necessary to execute the movement with sufficient force and effectiveness. It also requires training in the correct technique to transfer the greatest amount of force to the ball or weight).John & Art, 2020, P: 501)

Thus“ ,strengthening the arm that pushes the weight is important to increase the level of pushing the weight in athletics by improving the performance of explosive movements, which require the production of high force in a short period of time, especially in exercises that require the use of muscular strength to throw weights or perform strong movements with the arms, to strengthen the arms, A group of various exercises can be practiced that target this area effectively) .BRYAN & BELCHER, 2018, P:121)

Also“ ,exercises must be closely linked to the movements in the skill, and the training program must focus on the muscles working in the performance itself) ”.Frizzell & Dunn, 2015, P: 404–405)

“Developing arm strength through diversification has many benefits, the most important of which is the balance of muscle development, as when you vary exercises between muscle contraction and static, a variety of muscles in the arms are stimulated, including the biceps and triceps muscles. This helps balance the development of Muscles and avoid neglecting to strengthen certain muscles at the expense of others) ..Baker & Other, 2023, P: 92)

“Diversifying between static and muscle contraction in arm strength development exercises is of great importance in strength sports and athletics. This diversification includes the ability to strengthen the muscles when they are contracted (when bending the arm) and when static (when extending the arm), because the total strength of the arms lies in Endurance and control of strong movements in both directions) .Thomas & Newton, 2017, P: 152)

Likewise“ ,it is difficult for trainers to devise means of isolating the muscles participating in the technical performance of skills by making them work individually, which results in them resorting to diversity and exchange to include most of the muscles under the influence of resistances, provided that each resistance is proportional to the size, type, and direction of its work in that skill)”.Mc Bride & Other, 2022, P: 581)

Although muscular endurance exercises have in common their targeting of contraction volume and speed, and thus, depending on the type of effort in those exercises, they affect the neuromuscular work of weightlifters. Identifying and following up on the body’s internal reactions is a necessity for every coach or researcher in the physiology of sports training. To protect the player first and then monitor his development by inferring the physiological state, which must be associated with an improved level of performance in this event, as“ it was believed that human skeletal muscle fibers are innervated by only one nerve cell branch, but this branch may be one of Between (10-1000) similar branches, (Easa et al., 2022) the axon has the same, so every axon has axon)(It is connected through its peripheral branches to a number of muscle fibers, and this functional unit is called a motor unit (motor unit), and the size of the motor units (muscle fibers and nerve cells) varies within the muscle, as does their number)”.RONALD, 2009, P: 8)

Also“ ,the myosin heads can bind to the other actin unit furthest along the thin filament, and this bonding cycle requires electrical instructions coming from the brain to activate the process of separation and activation of the myosin repeatedly for the sliding filaments in this method and continues as long as calcium is present (in its concentration of increase) .

10come on μM (In the sarcoplasm, when calcium is returned to the calcium pump in the sarcoplasmic reticulum ...,ATPase ((and) ATP (They re-block the tropomyosin to form the crossing bridge and the muscle fiber relaxes, (Hussein and Aed, 2013, p. 69)

“The mechanism of transmission of electrical impulses from nerve fibers to skeletal muscle fibers and the occurrence of muscle contraction is summarized as follows ”:Motor area in the brain = nerve impulse = anterior horn of the spinal cord = motor nerve source = end plate of the motor nerve = acetylcholine reactions = adjustment of polarity Muscle fiber membrane = generation of a positively charged electrical potential = interference of fibrils within the muscle fiber) ”.Muhammad, 2000, p. 34)

Biochemically, to understand the mechanism of muscle contraction“ ,when the calcium ion and)...ATP (Available in sufficient quantities, the filaments interact to form actomyosin and shorten by sliding over each other, and as the electrical excitation passes effectively along and below the sarcolemma, the calcium pump releases calcium ions from the sarcoplasmic reticulum to the sarcoplasm, and then subsequently works to activate and contract the row of filaments. This excitation begins The nerve stimulus reaches the muscle membrane through the motor end plate (the motor unit)) ”.Guyton, 2010, P: 147)

Because, through the limits of the researcher’s experience and academic orientation in the physiology of athletics training and repeated field visits to weight-pushing exercises at the Communications Club, she noticed the need to raise the level of achievement of the players by adopting modern methods that suit the privacy of these players and the specificity of the effectiveness, as her observation focused specifically on a weakness in control. Neuromuscular, which shows the large number of errors in crossing the throwing circle with the supporting foot, in addition to the weakness in this achievement, which affected the decline of the club players in the competitions held at the national level. (Kadhim, 2024) Thus, the research aims to prepare exercises for the third intensity zone by varying the muscle elongation of the muscles of the dominant arm and the supporting leg of the players. Pushing the weight, and identifying the effect of the third intensity zone exercises by varying the muscle elongation of the muscles of the dominant arm and the supporting leg on some physiological indicators and the achievement of pushing the weight. The researcher assumed that there are statistically significant differences between the results of the pre- and post-tests for peak and signal time) .EMG (For each of the muscles of the dominant arm and the supporting leg (the brachioradialis, the brachioradialis of the dominant arm, the anterior rectus femoris, and the gastrocnemius) at the moment of starting the rotation phase to push the weight for the players of the experimental group, there are statistically significant differences between the results of the pre- and post-tests for achieving the weight-pushing distance for the players of the experimental group.

Method and procedures:

The experimental research approach was adopted by designing a single experimental group with tight control in the pre- and post-tests. The boundaries of the research community were represented by the young players in the hammer throwing event in the Telecommunications Club, who numbered 9) Players continuing their training for the sports season 2024/2023 (All of them were chosen intentionally for the sample of the current research with a ratio of (% 100) of their community of origin using a comprehensive

enumeration method to represent the experimental research group according to the determinants of the experimental design of the research.

To measure the electrical indicators of each of the muscles of the dominant arm and the supporting leg (the brachioradialis, the brachioradialis of the dominant arm, the anterior rectus femoris, and the gastrocnemius) at the moment of starting the rotation phase to push the weight, the researcher used a device) EMG (type) Myo trace 400 (American made, sent by)...Bluetooth (With four detectors, signal results are obtained) EMG (After synchronizing between two types of digital cameras) SONY (Its speed does not exceed 75) Image.second) and analyze these signals with a program) Myo Research XP 1.06.67 (The store is stored in a laptop computer, in order to read both the peak and time of the signal in this measurement)EMG (For each of these muscles in order to infer the body's internal reactions to the third intensity zone exercises by varying the muscle elongation and the neuromuscular control processes it causes for each of these muscles. The hammer throw event test was also adopted in accordance with the conditions of competition in the International Law of the Athletics Federation, according to its bulletin. International for the year (2018) and the unit of measurement of the meter and its parts

The third intensity zone exercises were prepared by varying the muscle elongation of the muscles of the dominant arm and the supporting leg during the special preparation period and for a period of 8) Consecutive training weeks at a rate of (3) training units per week, each of which included (3-4) exercises that were applied in repetitions of (15-25) repetitions and in sets of (2-4) and with rest periods according to the phosphagenous energy system, as they were applied at the beginning of the main part. of the training unit by adopting the method of high-intensity interval training. The intensity of the exercises in one training unit ranged between (85-95%) and for a period ranging between (15-20) minutes out of the training unit's duration of (120) minutes, taking into account the gradation and undulation within the unit. Training, between one unit and another, and between one week and another

The experiment began by applying pre-tests on (11/16/2023), then applying these exercises for the period from (11/19/2023) until (1/11/2024), and concluding the experiment by applying post-tests on.(2024/1 /14)

The results were processed using) SPSS (version) V(28The percentage values, the arithmetic mean, the standard deviation, and the homogeneity of variance test were calculated) Liven ,(and test) T-test (for correlated samples.

Results:

table (1) shows the results of homogeneity of variance in the pre-tests

Measureme	Muscle	Testin	Arithmet	Standar)Leven)Say	Meanin
			mean	deviation			of the
ment hing the ght	Brachialis	Peak	440.56	22.423	0.144	0.58	Not a
		nal (MG)					h
	brachioradia forearm	time	0.579	0.034	0.123	0.66	Not a
		nal (MG)					h
	Anterior us femoris	Peak	430.78	24.407	0.466	0.03	Not a
		nal (MG)					h
	Leg twins	time	0.581	0.036	0.123	0.19	Not a
		nal (MG)					h
	Achievement of pushing the weight	Peak	414	43.203	0.099	0.70	Not a
		nal (MG)					h
		time	0.592	0.044	0.136	0.68	Not a
		nal (MG)					h
	Peak	430	32.68	0.287	0.19	Not a	
	nal (MG)					h	
	time	0.557	0.036	0.401	0.07	Not a	
	nal (MG)					h	

Not significant: (Sig) (0.05) > at the significance level (0.05) and the degree of freedom n-1(8) =

Table (2) shows the results of the pre- and post-tests

Measur	Muscle	Test	Compa	The	Stan	Aver	Vari)()Sa	Mea
ent			n	de	d	erenc	e			g of
				Arith	iation		iation			erenc
				mic						
(EMG)	Brachial	Pea	previo	440.5	22.4	131.	27.1	14.	0.0	Dal
		signal (MG)	the	572.2	16.2					
ment hing the ght			t							

		time nal (G)	previo	0.579	0.03	0.12	0.03	10.	0.0	Dal
			the	0.457	0.00					
	brachior alis earm	Pea signal (G)	previo	430.7	24.4	93.6	18.0	15.	0.0	Dal
			the	524.4	9.54					
		time nal (G)	previo	0.581	0.03	0.12	0.03	10.	0.0	Dal
			the	0.454	0.00					
	Rectus oris gnum	Pea signal (G)	previo	414	43.2	135.	44.7	9.0	0.0	Dal
			the	549.4	26.8					
		time nal (G)	previo	0.592	0.04	0.13	0.04	9.2	0.0	Dal
			the	0.457	0.00					
	Leg ns	Pea signal (G)	previo	430	32.6	87.3	36.9	7.1	0.0	Dal
			the	517.3	10.5					
	time nal (G)	previo	0.557	0.03	0.10	0.03	8.7	0.0	Dal	
		the	0.453	0.00						
Achievement of pushing weight			previo	48.89	3.98	6.88	3.88	5.3	0.0	Dal
			the	55.78	3.15					

Lentils) :Say (0.05) < (At the level of significance (0.05) and degree of freedom (N)-1.(8)=

Discussion

From reviewing the results of Table (2), it is clear that the weight-pushing players in the experimental group improved Physiological indicators of condyle electrophysiology and signal time) EMG (The muscles of the dominant arm and the supporting leg (the brachioradialis, the brachioradialis of the dominant arm, the anterior rectus femoris, and the gastrocnemius) at the moment of the start of the rotation phase to push the weight in the results of the post-tests were better than what these results were in the pre-tests, and also their distance of pushing the weight improved in the results The post-tests were different from what these results were in the pre-tests, and the researcher attributes the emergence of these results to the positive effect of applying the third intensity zone exercises by varying the muscle elongation of the muscles of the dominant arm and the supporting leg during the period of special preparation, as these exercises proved their effectiveness within a period of (8) weeks and their suitability. (Muhsen & Mohsin, 2020) In bringing about this physiological development with the appearance of the high peak of the signal) EMG (In a shorter time in the post-tests for each of the muscles under study, this physiological development was reflected in the ability to produce muscular force, the results of which showed an improvement in increasing the distance to complete the push of the weight, and in appropriate repetitions in increasing the speed of contraction of the muscles of the dominant arm that perform the push of the weight and tightening the muscles of the supporting leg to produce (Jawad et al., 2024) The greatest efficiency in producing muscle force, through the proper use of resistance with these exercises and through performing movements for muscle contraction, helped to increase the peak signal) .EMG (In a shorter time, by adopting the principle of varying the muscular elongation of the arm muscles in the cycle of shortening and abduction according to the type of exercise and the training intensity that suits the physical effort with these resistances and the moving and static elongation. The results of this research had a clear role in inferring the lack of muscle viscosity and the lack of internal resistances that impede contraction, in addition to the neuromuscular control factor improved at a high speed, showing results that were in line with the results of the development of weight-pushing achievement.(abdulaziz Muhsen & abdulaziz Muhsen, 2020)

As“ it is possible for the training program to bring about constant changes and adaptations in the characteristic of muscle elongation, especially if it exceeds a period of (6 weeks) ”.Abdullah, 2010, p. 208) (H. H. Ali et al., 2020)

Thus“ ,training based on the gradual progression of the training load from one training unit to another with an appropriate increase will lead to appropriate muscular adaptation to this increase, leading to improvement of muscular strength. Accordingly, the trainee must set specific goals for his capabilities) ”.Adel, 2001, p. 254)

Also“ ,exercises that target the third intensity zone contribute to improving the performance of athletes in a variety of sports, such as athletics, speed and explosive power ”.)Lloyd & Other, 2016, P: 1239)

Also“ ,it is possible to obtain the greatest efficiency of muscular work when the muscle contracts at a moderate speed, and in the case of slow contraction or without motor output, large amounts of maintenance heat) Maintenance heat (It will be lost during the contraction process, even though no or little work is done, and thus the efficiency of muscle contraction decreases, and the highest effectiveness is obtained when the speed of contraction reaches) ”.(%30)Sylvia, 2001, P: 874)

Also“ ,third intensity zone exercises help with some functional improvements“ ”.By strengthening muscles and developing the ability to make fast and powerful movements, this type of exercise can improve daily performance and the ability to move efficiently) .”Haff & Triplett, 2016, P: 103) (Asleawa et al., 2020)

As it is“ the explosive movement (explosive power) through which the athlete exerts the greatest amount of force and at the highest possible speed. In order for the athlete to train in this movement as quickly as possible, the weight of the resistance used must be light in order to achieve the goal of the training) ”.Duffield & Bishop, 2019, P: 249) (N. K. Ali et al., 2020)

“The rapid and changing situations that the athlete faces in applying third intensity exercises can achieve progress in performing exercises that depend on the third intensity, and can contribute to building self-confidence and belief in the body’s capabilities, and then better improving the skill factor required) .”Lloyd & Other, 2016, P: 1247)

Thus“ ,exercises that focus on mobile contraction and exchange of muscle work work to develop fast-twitch muscle fibers and improve coordination between the nervous system and muscles. This contributes to increasing the ability to jump, run fast, and explosive power in different types of sports such as long jumping, lifting ”.Weights, throwing the ball, etc) .Ryan, 2018, P: 111) (Ahmed & Yousif, 2019)

Conclusion

Conclusions and recommendations:

-1Third intensity zone exercises by varying the muscle elongation of the muscles of the dominant arm and the supporting leg help increase the peak signal) .EMG (And reducing the time for each of the muscles of the dominant arm and supporting leg (brachialis, brachioradialis of the dominant arm, anterior rectus femoris, and gastrocnemius) in players at the moment the rotation phase begins to push the weight.

-2The third intensity zone exercises, by varying the muscle elongation of the muscles of the dominant arm and the supporting leg, help in developing the weight-pushing completion distance for the players.

-3It is necessary for weightlifting trainers to pay attention to physiological measurement by measuring signals)EMG (The dominant arm and supporting leg muscles of the players push the weight and plan and implement exercises according to physiological characteristics based on the results of this measurement.

-4It is necessary not to exaggerate the training loads or the amount of resistance to muscle elongation in order to reduce the problem of decreasing the speed of muscle contraction if the amount of these resistances increases.

Appendix (1) shows examples of exercises in the third intensity zone, varying the muscle elongation of the muscles of the dominant arm and the supporting leg.

- .1 Contraction with dumbbells) Dumbbell Bicep Curl:
the From a sitting position on a bench at a 90-degree angle or standing with your feet shoulder-width apart.
the Hold dumbbells in the dominant hand facing the floor with the arms extended at the sides of the body.
the Start by gradually bending the dominant arm until the dumbbells reach the top of the shoulder, focusing on using the front muscles of the dominant arm.
the Hold this position for a moment and then slowly return to the original position.
- .2 Straight bar contraction) Barbell Bicep Curl:(
the Stand with your feet shoulder-width apart or less and hold a 20-kg straight bar toward the ground.
the Start gradually bending your dominant arm until the barbell reaches the top of your shoulder, keeping your body and supporting leg stable..
the Hold this position and then slowly return to the original position.
- .3 Iron cord contraction) Cable Bicep Curl:(
the It uses the cable rope attached to the cable machine.
the Stand by placing your feet shoulder-width apart in front of the device, holding the rope with your hands extended on either side of the body, and focusing on stabilizing the supporting leg..
the Start by gradually bending your dominant arm until the rope is at the top of your shoulders.
the Hold this position and then slowly return to the original position.
- .4 Reversed contraction) Reverse Bicep Curl:(
the Hold the dumbbells or barbell in reverse, with the palms facing down.

the Stand in a straight and comfortable position, making sure that the arms are extended on either side of the body and focusing on stabilizing the supporting leg..

the Begin gradually bending your dominant arm until the dumbbell or barbell reaches above the shoulder.

the Hold this position and then slowly return to the original position.

.5 Mild contraction) Hammer Curl:(

the Hold a dumbbell with your dominant hand in an upright position, with the back palm facing the body (as if holding a hammer).

the Start gradually bending the dominant arm until the dumbbell reaches the top of the shoulder, focusing on the front and side muscles of the arm and focusing on stabilizing the supporting leg..

the Hold this position and then slowly return to the original position.

.6 Multi-movement exercises) Compound Exercises:(

the Combine arm exercises with multi-action exercises such as pulling, extending and contracting, such as cable pull-ups and triceps pull-ups) Tricep Pushdown (And the back pull exercise) Pull-Up .(Focus on stabilizing the supporting leg.

.7 Lift weights quickly:

the Lift weights (dumbbells or bar) with the dominant arm using maximum force and as quickly as possible.

the Emphasis is placed on the rapid movement of the dominant arm and supporting leg and the explosive ability to lift weights.

.8 Quick clicks:

the Use a Chinese air ball and hold it between your hands.

the Squeeze the ball hard and release it quickly, then catch it again and prepare for the subsequent squeeze.

.9 Rapid contraction:

the Stand in front of the machine and use a cable rope or light weights.

the Contract quickly and forcefully, then slowly return to the original position, focusing on stabilizing the supporting leg.

.10AFor the strong basket) Medicine Ball Throws:(

the Keep a medicine ball or heavy ball between your hands.

the Pounce forcefully and throw the ball away as quickly as possible, focusing on stabilizing the supporting leg.

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