

Rugby macrocycle training



**ASSIGN
BUSTER**

A Rugby Macrocycle

The training period for the rugby year begins in October and is divided into four phases: off season (between October and January), pre-season (between February and April), in-season (between May and September) and transition (in October). All athletes must be tested and prescribed an individual exercise regime since each member has specific needs relating to their position (Baker, 2001). However an overview of the both backs and forwards' training programs is useful. It does not include dieting since each player follows a well-developed plan created by the team's dietician. The rugby team's training goal is to ensure that retention, pre-season and off-season, and the hope is to prepare the players physically and mentally for the in-season.

There are six movement patterns used on daily basis by rugby athletes. They include squat, bend, push, pull, twist and single leg. Squat, push and bend helps the rugby players in scrummaging. Pushing strength is important in rugby hence the players must carry out resistance training that develop chest and shoulders for scrummaging. According to Campbell, Peake & Minett (2018), squat, bend, push and pull helps rugby players in rucking. Squat, single leg, Push and pull helps the player to gain mauling power. Practicing these partners in the gym can help in the athlete to play well when under pressure in the field. Squats increase strength in the hips and legs, it also reduces injury by developing balance, coordination and flexibility at the knees, ankle and hips. Pushes are upper body movements of pushing gym materials away from the body while pulling involves drawing objects towards the body. Bends helps to protect the body from injury and back pain.

Rugby players constantly bend their waist when playing hence should train the body to keep a natural curve in the lower back. The athletes experience twists through their torso when passing the ball. They also resist twisting movements in a scrummage hence should perform full body twists.

Each position in the rugby team requires a different physiological make up hence the need for pre and post testing during the training. For instance, those taking forward position should take hits and compete physically for ball possession. However, the backs should be explosive and agile to fill the gaps. The team will have pre-tests for anaerobic fitness, strength, speed, power and flexibility. Anaerobic strength is the player's VO₂ max and the efficiency of their heart lungs and muscle. It will be tested using a treadmill to measure the composition of inhaled versus exhaled oxygen and carbon dioxide respectively. The aerobic results will help to build cardio programs for flankers and number 8s in the team. Strengths will be tested using 1-RM tests. It is a test that help the player to objectively set their training. It is tested by taking the weight against a number of reps that the athlete can do in squats, bench press, and deadlift. The speed test of the team is a 10 meter/40 meter sprint test since rugby springs are majorly short. The test measures acceleration and maximum sprint speed (Campbell, Peake & Minett, 2018). The athletes will make three attempts after thorough warm up. Their power will be measured using the standing long jump and standing vertical jump. Achieving a distance of 2.5 to 2.8 meters puts the rugby players in the recommended 51-60 percentile. The athletes will sit and try to reach past their toe as an indicator of overall flexibility.

The first training phase is off season between October and January. The training days include Monday, Tuesday, Wednesday and Friday. During this period the training will help athletes improve in their weak areas. The resistance training goals in this phase include hypertrophy, strength base and muscular endurance and should take place in October and December. The conditional training goals during the off season are aerobic, anaerobic and endurance and take place in November and January. This phase is characterized by high training goals but medium training intensity. The exercises for backs involved in this stage include squats, split lunge, DB bench press and DB shoulder press. The forward athletes need strength which they obtain by squats, dead lifts, bench press and bent over rows.

The second training phase is Pre-Season during the periods between February and April. This phase involves testing advancements and improvements in athletes' weak areas tested during off season. The resistance training goals for this season is strength and power, which should be the focus in February and March for the three months. The conditioning training goals are anaerobic capacity, high intensity interval training (HIIT) and Speed agility and quickness (SAQ) practiced in March and April. Conditioning training will be done in February and April. Training volume in this phase is medium while the intensity is medium-high, a slightly higher level than in the first phase. The athletes should perform exercises such as box jumps, trap bars squat jumps, hung cleans and sledge drags for backs (Baker, 2001). Exercises for forewords under this phase include Trap bar dread lifts, sumo squats, power cleans and BB push press.

During the in season (May-September), the Rugby athletes need to maintain their strength, power and size. The athletes should be tested occasionally for their strength power and size. There will be low impact skills exercise before the game. The athletes should have light running and stretches to restore strength and remove soreness. The resistance training goals for the third phase are therefore maintaining player's strength, power and size. To achieve the resistance training, the goals the athlete must meet the conditioning goal which is to maintain physical fitness (Campbell, Peake & Minett, 2018). Training volume at this level is low medium-medium but the intensity of training will raise to high medium. The exercises during in season will be complex and involve full body sessions. May and June will be month of neural load, Base load and volume de-load. The intensity varies latter from July to September depending on the individual athletes' needs during the games.

October is 4-week period of active rest and recovery. The resistance training and conditioning training goals during this phase are minimized exercise and rest. The training volume and intensity during transition is unstructured. The athletes should have some time to rest and stay away from intense exercise (Gabbett, Jenkins & Abernethy, 2012). The recovery period is also a time for rehabilitation for injured athletes. There are no specific exercises for the backs and forwards since the individual athlete training is unstructured.

In general, the Rugby sport involves intermittent, short period, high intensity exercise with maximal efforts of power and strength. The players' bodies must be trained for muscular endurance, agility and speed to keep meet their physiological needs. The training should enable the professions backs

and forwards in the team to cover up to 6km in a single game. They also need to spend half of their playing time at 78-90% of HR_{max} (Baker, 2001). The athletes are expected to produce maximal spring velocities that last 4 to 6 seconds while covering up to 60 meters at a time. The training also exposes them to high impact load that ranges between 6000N and 9000N when there are faced with a scrum or tackle situation in the field.

References

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