

The Importance of Warm up and Cooling Down.

INTRODUCTION

The warm-up takes place before training or a game and cooling down (warming-down) immediately after. Both are of paramount importance in producing and maintaining high performance levels.

The aim of warming-up is to allow players to gradually adapt and prepare themselves both physically and mentally for the training session or the game itself. It's aim can be summarized as:

- 1. To increase performance levels.
- 2. To decrease the risk of injury.

As well as getting ready for the training session or game, players must be prepared to finish... Players using a cool-down period may be in better shape for the next game or training session than those who simply return to the dressing room.

PHYSICAL BENEFITS

Evidence shows that improvements in physical performance after a decent warm-up are particularly related to an increase in muscle temperature. The higher the muscle temperature, the better the performance.

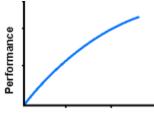


Fig1: Shows how as the player's muscle temperature gradually increases, sprinting performance increases.

Muscle Temperature

A player must always be ready and capable of producing 100% in terms of effort at the beginning of the game. An increase in muscle temperature allows the muscle to better produce energy and as well flexibility can be improved by 20 percent. Reaction times will also be improved and the chances of injuries such as muscle tears are reduced. The following summarizes the effects of a correct warm-up:

1. The circularity system slowly prepares the body for exercise, think of how a car's engine needs to be warmed up before taking the road.

2. The body's chemical processes involved in physical activity, slowly but surely begin to work. The energy necessary for exercise is immediately available while better sparing that necessary for the end of the game.

3. Muscle tightness from previous matches (especially important when many games are played in a short period of time) or from a long journey may be relieved.

4. Football players are surprisingly not very flexible and thus when muscles (which are naturally quite rigid and resistant to sudden increases in tension) are cold, then they can easily rupture. Warming-up increases flexibility and decreases rigidity.

5. Good technique is important at the beginning of games and being physically ready allows better practice and use of these skills.

Cooling down has been proved to help reduce the effects of matches or high-intensity training. Lactic acid, a by-product from exercise accumulates in the muscles and undertaking light-jogging for example will help to remove this quicker. Players who have cooled down after a game have been shown to have lesser levels of fatigue the following day. After a game or training session, as the muscles are warm then this is a good time to stretch. Muscles can be considerably shortened after exercise and can take up to two days to return to their normal length. Without regular stretching (before and after exercise) muscles can be permanently shortened.

PSYCHOLOGICAL BENEFITS

A pre-match warm-up is useful in helping to either reduce or increase player motivational levels. Often players are too tense and a good quality warm-up session will reduce their anxiety levels and get rid of excess tension (adrenaline). At the same time, it can mentally fire up players...

It will also help players to get used to the atmosphere in the stadium, to the playing area and allows them to rehearse their technique. This is especially important for away games. Finally, soccer is a team sport and a team warm-up will strengthen the players sense of belonging to the social structure of the team.

Finally, A cooling-down session can give a team and coach time to discuss about the game or training session. Like warming-up it can help the social structure of the team.

For more on the psychological side of the game **click here**.

CONCLUSION

We have seen the importance for players to warm-up and cool down. The different benefits are better playing performance, decreased risk of injury and improved psychological preparation. Players at any level can often disregard this part of the game; It is up to the coach to make sure and encourage his team to always correctly prepare itself.

For other articles on how to warm-up and cool down click here.

♦ back top