## Extended abstract No. 400

## EXPERIENCES OF THE PEAT SAUNA FOR ATHLETES

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## **SUMMARY**

The research has been carried out with the soccer players in Valkeakoski town from February to October in the season 2011. The FC Haka team (18 players) came to the Sportspa Aino directly after their game or training session 8 times during the season with intervals varying from 17 to 66 days. They had the whole body peat mask in the sauna, rested and enjoyed a supper. The peat sauna is a variant from the ordinary sauna. In the peat sauna the whole body is covered by peat and then clients stay 20 minutes in sauna of 50-60 °C heat and at least 55 % humidity.

During this season, a player of the FC Haka team was absent from the game in average 7.6 times. Mean absence per injury was 2.6 days. This is less than a half from the absence/injury which the FC HJK team (Helsinki) had during the season 2008. Every team member found the peat sauna very relaxing and good for the spirit of the team.

KEYWORDS: peat, sauna, peat mask, soccer, injury, injury prevention

# INTRODUCTION

The aim of this study was to examine the peat sauna as a means of preventing injuries in the soccer. Injuries are common in the soccer which results players being absent from the practice sessions and games. Such an absence reduces the financial return on investment of the team as the team is not likely to perform as well as it would, if there were no absences due to injuries.

In our research with menopausal women in the peat sauna in 2008-2009 we had found the effects of decreasing pains and raising mood (1), which are effects that a football-team would also benefit from.

#### METHODS AND MATERIALS

The soccer team FC Haka (men) playing in the elite series in Finland participated in the study. From February to October in 2011 FC Haka team (18 players) came to the Sportspa Aino eight times during the season with intervals from 17 to 66 days. The peat sauna is a variant from the ordinary sauna. The players took on the whole body mask of the therapeutic peat from the Lehtosalonsuo mire. The quality of the peat has been studied by the Geological Survey of Finland. The peat type is *Sphagnum Carex* peat with some remains of *Equisetum*, *Phragmites*, *Lignidi* and *Nanolignidi*. The decomposition (humification) degree of the peat is H8 on the von Post scale H1-H10, pH value is 5.7, the water content 88 % on the wet weight, the ash content 6.7 % and the sulphur content 0.21 % on the dry weight. The heat retention capacity of the peat was very good. The average content of humic acids was 28 %, fulvic acids 10 %, pectin 0.3 %, cellulose 8.5 %, hemicellulose 12 % and humins 41 % on the dry weight. There were none noticeable amounts of heavy metals in the peat but instead some amounts of healthy trace elements.

After drinking 400 ml water the players went to the sauna and warmed up their bodies for few minutes. Then the peat was applied on the whole body and the players returned to sauna (temperature 50-60 C, humidity over 55%) for a maximum duration of 20 minutes. After that they washed the peat off and rested for 20 minutes.

The physiotherapist of the team monitored the injuries and counted the days of absence due to injuries from the games and practice sessions. We found only one team in Finland (FC HJK Helsinki) to compare our findings with who had monitored the absences due to injuries.

## RESULTS

During the season 2011 the team suffered from 52 injuries which resulted absences from 136 games. Because of these injuries the players were absent from the games in average 7.6 games per player. Mean absence/injury relationship was 2.6 days. Every team member found the peat sauna very relaxing and improving the spirit of the team.

## CONCLUSION

We found that the response of the team to the peat sauna was very good. The players liked it and the coaching staff concluded that the effect of the test in whole was uniting the team. The average absence/injury rate was less than a half of what it was in the team of FC HJK in 2008

## **REFERENCES**

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