

# **Frequent pain and injuries among long distance triathletes and their potential risk factors**

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## **Introduction**

During the last years long distance triathlon developed towards becoming a trend sport. As extensive training is vital in order to participate in such an event, the assumption that triathletes experience pain and suffer various injuries throughout their career only comes natural. The aim of this study was to investigate the frequency and the kind of pain and injuries triathletes suffer while training and competition. Furthermore, this study intends to identify the risk factors which are most commonly related to, and responsible for, the most frequently occurring injuries and forms of trauma and pain.

## **Methods**

With the support of the Austrian triathlete association the link to the online-questionnaire - which had been translated into 5 languages - was sent to 30 000 athletes between July 2011 and February 2012. Of those, 1158 (990 men, 168 women) athletes from 43 nations, with an average of 41 years of age (SD=8,9 years), answered the questionnaire correctly.

## **Results**

Specific training volume, as well as strength, stability and flexibility training, is higher among women than men. Even though the body's core supporting function is of great importance, many triathletes neglect to work on strength and stability of their shoulders, as well as of their legs. The findings of the survey clearly show that athletes who did a greater number of (intensive) hours, sessions and long distances in the pool, as well as increased resistance training, significantly endured more pain in the shoulder than those who worked less in these areas. However, athletes who put an emphasis on flexibility and strength in their training, specifically for the shoulder, answered that they experienced significantly more pain in their shoulders than others. It seems that men who cycle (16%), as well as women (32%), have already experienced pain in the genital area. Furthermore, about a third of the cyclists complained about low back pain and neck pain due to extensive training. Athletes who trained in aero position (tribar), complained about low back pain. In regards to running about a third of all triathletes have already experienced achillodyn, or „runner's knee“, and „iliotibialis ligament syndrom“., „Fasciitis plantaris“ (14%) and stress fractures of the Metatarsals (3%) turned out to be serious problems as well .

## **Conclusion**

In order to plan the training of competitive triathletes appropriately, the athletes physical pre-conditions have to be taken into consideration, as well as the, often extreme and highly specific, volume. Furthermore, it has to be said that it is very important to treat symptoms, which might occur during the training, seriously in order to prevent the development of chronic pain and injuries.