

Study of the shod feet of type 2 diabetics in relation to their footwearŠibová B., Pavlačková J., Hlaváček P.

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Introduction: This study evaluates the status of footwear in risk groups susceptible to increased foot injury - type 2 diabetics. The experiment was conducted in several countries (Czech Republic, Bulgaria, Mongolia) in the years 2004 - 2007. The parameters investigated included those shoes characteristically worn by the diabetics in relation to adequate anthropometric foot dimensions. **Methods:** Using templates placed inside the footwear, the interior space of the footwear was monitored (length and width or girth) in the area of the insole. A structural diagram of the last insole was used to produce the templates. The templates were completed in metric numbering from 22 cm to 33 cm in girth groups A through O (corresponding to a range from 118 mm to 306.5 mm). **Results:** Comparing the insole length and the length of the foot, those in the ideal difference in range of 5 to 9 mm were noted in 25% of the Czech male diabetics and 14% of the Czech female diabetics; over 10 mm were found at 35% of the male diabetics and 71% of the female diabetics. In the group of Bulgarian diabetics, those in the ideal range of 5 to 9 mm totalled 15% male diabetics and 23% female diabetics, over 10 mm already in 65% of male diabetics and 31% of female diabetics. The group of Mongolian diabetics in the ideal range of 5 to 9 mm was measured at 17% of male diabetics and 18% of female diabetics; over 10 mm were 48% of male diabetics and 68% of female diabetics. The highest percentage of Czech male diabetics (25%) was found in girth group K and female diabetics (23%) were in group I. 23% of Bulgarian male diabetics were in girth group H and for female Bulgarian diabetics, 25% were in group G. 27% of Mongolian male diabetics were in group M and 35% of Mongolian female diabetics were in group I. **Conclusions:** 1. Diabetics predominantly wore footwear of unsuitable dimensions, which could have led to injury to their feet, which is very alarming particularly among groups of diabetics. Mongolian male and female diabetics and Czech female diabetics wore this footwear to a greater degree. 2. The girth group determined by measuring the feet of diabetics is absolutely insufficient for covering the current range of footwear offered, which is significantly narrower, particularly in the susceptible areas for possible injury or pressure defects. From the measurements, it follows that Bulgarian male and female diabetics have narrower feet than Czech and Mongolian male and female diabetics.