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| **Appendix 5: Characteristics of the studies included in the meta-analysis.** | | | | | | | | | | | | |  |
| **Reference** | **Study**  **Duration\*** | **Nº Teams** | **Exposure (hours)** | | | **Injuries** | | | **Incidence** | | | **STROBE (reporting) quality** | **NOS (methodological) quality** |
| **Country / Tournament** | **(Players)** | **Overall** | **Training** | **Match** | **Overall** | **Training** | **Match** | **Overall** | **Training** | **Match** |
| Almutawa et al.35 F  *Yemen/Saudi NT – 2010* | 4 | 1  (31) | 1901.1 | 1785.6 | 115.5 | 18 | 8 | 10 | 9.5 | 4.5 | 86.6 | High Quality | 6 |
| Almutawa et al.35 F  *Qatar/Saudi NT – 2011* | 4 | 1  (32) | 1481.4 | 1382.4 | 99 | 26 | 8 | 10 | 17.6 | 11.6 | 101 | High Quality | 6 |
| Andersen et al.36  Norway – 2000 | 39 | -  (330) | - | - | 5742 | - | 10 | 121 | - | - | 21.5 | High Quality | 7 |
| Arnason et al.37  Iceland – 1991 | 39 | 5  (84) | 6854.84 | - | - | 85 | 9 | - | 12.4 | 5.9 | 34.8 | High Quality | 8 |
| Arnason et al.10  Iceland – 1999 | 39 | 17  - | 33839 | - | - | 244 | 9 | - | 7.2 | - | - | High Quality | 7 |
| Arnason et al.38 Control  Iceland – 2000 | 39 | 8  (144) | 14617 | 11773 | 2844 | 96 | 9 | 74 | 6.6 | 1.9 | 26.9 | Low Quality | 7 |
| Bayne et al.39  South Africa – 2015 | 40 | 2  (56) | 20361 | 19272 | 1089 | 33 | 9 | 18 | 1.6 | 0.8 | 16.5 | High Quality | 7 |
| Bjørneboe et al.40 F  Norway – 2002 | 234 | 14  - | 494157 | - | - | 2365 | 8 | - | 4.8 | - | - | High Quality | 6 |
| Calligeris et al.41  South Africa | 39 | 1  (32) | 9701 | 6515 | 754 | 130 | 10 | 67 | 13.4 | 6.6 | 88.9 | High Quality | 8 |
| Carling et al.42 F  France – 2009 | 195 | 1  (130) | 52513 | 47000 | 5513 | 372 | 141 | 231 | 7.1 | 3 | 41.9 | High Quality | 7 |
| Carling et al.43 F  France – 2005 | 156 | 1  (124) | - | - | 3246.7 | - | 9 | 130 | - | - | 40.5 | High Quality | 7 |
| Dupont et al.44 F  Scotland – 2007 | 78 | 1  (32) | 18495 | 16339 | 2156 | 165 | 60 | 105 | 8.9 | 3.7 | 48.7 | High Quality | 8 |
| Dvorak, et al.45 F  *South Africa/WC – 2010* | 4 | 32  (736) | 15206 | 13160 | 2046 | 140 | 58 | 82 | 9.2 | 4.4 | 40.1 | High Quality | 6 |
| Dvorak et al.46 F  *Germany/WC - 2006* | 4 | 32  (736) | - | - | 2112 | - | - | 145 | - | - | 45.9 | Low Quality | 5 |
| Eirale et al.47 F  *Qatar NT – 2007* | 68 | 1  (36) | 10043 | 9482 | 561 | 78 | 41 | 37 | 7.8 | 4.3 | 65.4 | High Quality | 8 |
| Eirale et al.48 F  Qatar – 2008 | 117 | 5  (527) | 164434 | 142230 | 22206 | 826 | 462 | 364 | 5 | 3.1 | 16.4 | High Quality | 7 |
| Ekstrand & Tropp49 (a)  Sweden | 39 | 9  (135) | 30554 | 23241 | 7313 | 261 | 107 | 159 | 8.6 | 4.6 | 21.8 | Low Quality | 7 |
| Ekstrand & Tropp49 (b)  Sweden | 39 | 12  (180) | 33652 | 24499 | 7219 | 288 | 125 | 135 | 8.5 | 5.1 | 21.8 | Low Quality | 7 |
| Ekstrand et al.11  *Sweden NT – 1991* | 234 | 1  - | 7245 | 6235 | 1010 | 71 | 40 | 31 | 10 | 6.5 | 30.3 | Low Quality | 7 |
| Ekstrand et al.21 F  European teams – 2003 | 195 | 15  - | 218265 | - | - | 1791 | - | - | 8.2 | - | - | High Quality | 7 |
| Engström et al.50  Sweden | 39 | 3  (64) | 17000 | 14592 | 3136 | 85 | 44 | 41 | 5 | 3 | 13 | Low Quality | 7 |
| Fünten et al.51 F  Germany – 2008 | 34 | 7  (254) | 48324 | 42932 | 5483 | 300 | 141 | 159 | 6.2 | 3.3 | 29 | High Quality | 7 |
| Gouttebarge et al.52 F  Australia – 2008 | 195 | 49  (1127) | - | - | 10791 | - | - | 845 | - | - | 78.3 | High Quality | 8 |
| Hägglund et al.12 (a)  Sweden – 1982 | 39 | 8  (118) | 27966 | 21476 | 6490 | 236 | 99 | 137 | 8.3 | 4.6 | 20.6 | High Quality | 7 |
| Hägglund et al.53  Denmark – 2001 | 39 | 8  (188) | 27321 | 23095 | 4226 | 395 | 271 | 124 | 14.4 | 11.8 | 28.2 | High Quality | 7 |
| Hägglund et al.23 (a) F  Austria-Switzerland/EC - 2008 | 2 | 16  (367) | 5368 | 4310 | 1058 | 56 | 12 | 44 | 10.4 | 2.8 | 41.6 | High Quality | 7 |
| Hägglund et al.23 (b) F  Portugal/EC U21 – 2006 | 1 | 8  (176) | 1589 | 1076 | 513 | 22 | 5 | 17 | 13.8 | 4.6 | 33.1 | High Quality | 7 |
| Hägglund et al.23 (c) F  Netherland /EC U21 - 2007 | 1 | 8  (182) | 2321 | 1774 | 548 | 25 | 6 | 19 | 10.8 | 3.4 | 37.4 | High Quality | 7 |
| Hägglund et al.23 (d) F  Polonia/EC U19 - 2006 | 1 | 8  (144) | 1253 | 762 | 490 | 8 | 0 | 8 | 6.4 | 0 | 16.3 | High Quality | 7 |
| Hägglund et al.23 (e) F  Austria/EC U19 - 2007 | 1 | 8  (147) | 1158 | 654 | 504 | 15 | 1 | 14 | 13 | 1.5 | 27.8 | High Quality | 7 |
| Hägglund et al.23 (f) F  Czech Republic/EC U19 - 2008 | 1 | 8  (145) | 1461 | 957 | 504 | 15 | 2 | 13 | 10.3 | 2.1 | 25.8 | High Quality | 7 |
| Hägglund et al.54 (a) F  European teams - 2001 | 546 | 43  (6956) | 1613792 | 1356420 | 257372 | 11581 | 5154 | 6512 | 7.2 | 3.8 | 25.3 | High Quality | 8 |
| Hägglund et al.54 (b) F  European teams - 2001 | 351 | 19  (2014) | 521626 | 453150 | 68476 | 3836 | 2220 | 1609 | 7.4 | 4.9 | 23.5 | High Quality | 8 |
| Hassabi et al.55  Iran – 2005 | 16 | 1  (21) | 2610 | - | - | 50 | - | - | 19.2 | - | - | Low Quality | 7 |
| Hawkins & Fuller56  United States/WC - 1994 | 4 | 24  (412) | - | - | 1657 | - | - | 104 | - | - | 67.8 | Low Quality | 5 |
| Hawkins & Fuller15  England - 1994 | 407 | 4  (138) | 68000 | 55000 | 15096.5 | 578 | 187 | 391 | 8.5 | 3.4 | 25.9 | High Quality | 7 |
| Junge & Dvořák57 (a)  FIFA U20 WC | 21 | -  - | - | - | 12012 | - | - | 314 | - | - | 26.1 | High Quality | 6 |
| Junge & Dvořák57 (b)  FIFA Confederation Tournaments | 10 | -  - | - | - | 2640 | - | - | 51 | - | - | 19.3 | High Quality | 6 |
| Junge & Dvořák57 (c)  FIFA Club World Tournaments | 13.5 | -  - | - | - | 2541 | - | - | 81 | - | - | 31.9 | High Quality | 6 |
| Junge & Dvořák20  Brazil/WC - 2014 | 4 | 32  (736) | - | - | 2046 | - | - | 60 | - | - | 29.3 | High Quality | 6 |
| Junge et al.18 (a)  France/WC - 1998 | 4 | 32  (736) | - | - | 2046 | - | - | 149 | - | - | 72.8 | High Quality | 7 |
| Junge et al.18 (b)  Sydney/OG - 2000 | 2 | 16  - | - | - | 1023 | - | - | 52 | - | - | 50.8 | High Quality | 7 |
| Junge et al.17  Korea-Japan/WC - 2002 | 4 | 16  (736) | - | - | 2112 | - | - | 107 | - | - | 50.7 | Low Quality | 6 |
| Kristenson et al.58 F  Norway-Sweden -2010 | 78 | 33  (1044) | 367490 | 318568 | 48922 | 2241 | 1178 | 1063 | 6.1 | 3.7 | 21.7 | High Quality | 7 |
| Larrruskain et al.59  Spain – 2010 | 195 | 1  (50) | 38878 | 33487 | 5391 | 323 | 160 | 161 | 8.3 | 4.8 | 29.9 | High Quality | 8 |
| Lee et al.60 F  Hong-Kong - 2010 | 39 | 7  (152) | 39768.5 | 37143 | 2717 | 296 | 130 | 166 | 7.4 | 3.5 | 61.1 | High Quality | 8 |
| Nielsen & Yde61  Denmark – 1896 | 39 | 2  (34) | 10541 | 757 | 9784 | 37 | 14 | 23 | 3.5 | 2.3 | 18.5 | Low Quality | 6 |
| Noya et al.62 F  Spain - 2008 | 39 | 16  (427) | 228743 | 216705 | 12038 | 1293 | 769 | 524 | 5.7 | 3.6 | 43.5 | High Quality | 8 |
| Noya et al.63 F  Spain – 2008 | 39 | 11  (301) | 161602.7 | 153567.2 | 8035.5 | 891 | 579 | 312 | 5.5 | 3.8 | 38.8 | High Quality | 8 |
| Pedrinelli et al.64  Argentina/AmC - 2011 | 4 | 12  (276) | - | - | 891 | - | - | 63 | - | - | 70.7 | High Quality | 6 |
| Poulsen et al.65  Denmark - 1986 | 39 | 1  (19) | 4199 | 3440 | 759 | 29 | 14 | 15 | 6.9 | 4.1 | 19.8 | Low Quality | 6 |
| Reis et al.66 F  Brazil | 48 | 1  (48) | 16077 | 15120 | 957 | 70 | 29 | 41 | 4.4 | 2.4 | 42.8 | High Quality | 8 |
| Shalaj et al.67 F  Kosovo - 2003 | 39 | 11  (143) | 36833 | 31998 | 4834 | 272 | 101 | 171 | 7.4 | 3.2 | 35.4 | High Quality | 8 |
| Stubbe et al.68 F  Netherland - 2009 | 39 | 8  (217) | 46194 | 41012 | 5182 | 286 | 116 | 170 | 6.2 | 2.8 | 32.8 | High Quality | 8 |
| Waldén et al.19 (a) F  Portugal/EC - 2004 | 3 | 16  (368) | 4742 | 3694 | 1048 | 45 | 7 | 38 | 10.1 | 2.1 | 36 | High Quality | 6 |
| Waldén et al.19 (b) F  Ireland/ EC U19 - 2005 | 5 | 8  (144) | 1394 | 899 | 405 | 17 | 2 | 15 | 13.4 | 2.9 | 30.4 | High Quality | 6 |
| F Study was implemented according to the 2006 consensus statement for epidemiological studies in soccer.  (a);(b);(c): indicate different cohorts in the same study.  \*: study duration expressed in number of weeks.  AmC: American Tournament; EC: Europe Tournament; NT: National team; OG: Olympic Games; U: Under; WC: World Tournament. | | | | | | | | | | | | |  |