

Programme Formation

Actualisation scientifique et pratique

- Prévention et traitement du pied

Le renforcement du pied a été très largement sous-considéré depuis des décennies en rééducation. Cette formation se propose de passer en revue la littérature actuelle et constituant les fondements du « Gainage du pied 1.0 et 2.0 » ainsi que de mettre en pratique les principales composantes du bilan et du traitement moderne concernant le pied, sa force et ses pathologies.

Nous aborderons l'ensemble des éléments que le kinésithérapeute doit maîtriser afin d'obtenir une prise en charge optimale et minimisant le risque de récurrence ou d'instabilité chronique. A travers des éléments scientifiques et pratiques nous passerons en revue les tests, outils, questionnaires et exercices de rééducation les plus adaptés à la prise en charge du patient.



Intervenant

François Fourchet
Kinésithérapeute
Maître de conférence
Doctorat de sciences du sport
Formateur

Public : Kinésithérapeutes
Durée : 1 Jour soit 7 heures
Horaires : 9h00 - 18h
Prise en charge : FIFPL - DPC (sous réserve de validation)

Du bilan à la reprise d'activité et de la science à la clinique Les innovations scientifiques des 5 dernières années au service des thérapies du pied

Objectifs

Partie Pied :

Le stagiaire devra être capable :

- De connaître les données essentielles de la littérature concernant le renforcement du pied 1.0 et 2.0
- D'appliquer les bilans et les stratégies de rééducation en lien avec les la force du pied
- De connaître l'évaluation et le traitement des principales pathologies du pied

Moyens pédagogiques et techniques :

Apport théoriques - Travaux pratiques

Un support de formation est remis à chaque stagiaire. La pédagogie est active et participative, alternant des apports théoriques et des phases de mise en pratique. L'évaluation de la progression des stagiaires est réalisée tout au long de la formation, au travers des échanges et par le biais d'exercices de synthèses individuels ou de groupe.

Modalités d'évaluation :

Contrôle de connaissances pré-formation et post-formation sous forme de QCM et de questions à réponses courtes

Déroulé pédagogique

Jour Pied (7h)

9h Accueil des participants

Présentation de la formation, des participants et de leurs attentes
Questionnaire de début de formation

9h-9h30 La théorie du gainage du pied 1.0

- Historique et rappels anatomiques : muscles intrinsèques du pied
- Explications des premiers travaux scientifiques et des exercices (short foot, toe-spread out, 1st hallux extension, 2nd to 5th extension, NMES)

9h30-10h30 La théorie du gainage du pied 2.0 par le renforcement

- Rappels biomécaniques de la fonction du pied : muscles intrinsèques du pied, muscles extrinsèques du pied et la cheville
- Explications des derniers travaux scientifiques et limites des précédents exercices
- Stratégies de bonification des exercices (charge ++, forward lean, MTP flexion, NMES)

10h30-11h15 : Pratique

- Le gainage du pied 1.0 : réalisation des exercices assis et debout et leur progression vers NMES
- Le gainage du pied 2.0 : réalisation des exercices avec stratégies de bonification

11h30-12h30 La prise en charge en phase aigüe

- Raisonnement clinique et diagnostic différentiel des pathologies du pied
- Les contentions spécifiques du pied

14h-14h30 L'évaluation du complexe du pied

- Explications scientifiques du rôle de la posture et de la déformation du pied dans la fonction dynamique du pied
- Evaluer la coordination musculaire du pied : clinique
- Evaluer la force musculaire analytique du pied (flexion des MTP) : science vs clinique
- Evaluer la force musculaire fonctionnelle du pied (heel rise, foot ankle rebound jump) : science vs clinique

14h30-15h30 Pratique

- Réalisation des évaluations de coordination du pied
- Réalisation des évaluations de la force musculaire analytique et fonctionnelle du pied

15h45-16h30 Le rôle pliométrique du pied dans la course à pied

- Biomécaniques et justification scientifiques

16h30-17h15 Pratique

- Réalisation des gammes athlétiques pied-cheville
- Réalisation des exercices de pliométrie basse pied-cheville
- Réalisation d'exercices pliométrique avec NMES

17h15-18h Conclusion et Q/R finales + questionnaires post-formation

Publications scientifiques

- (68) Tourillon R, Six A, Bothorel H, Fourchet F. Are foot posture and morphological deformation associated with ankle plantar flexion isokinetic strength and vertical drop jump kinetics? A principal component analysis. (2023). Sports Biomech. Mar 24;1-15. doi: 10.1080/14763141.2023.2191868.
- (67) Picot B, Lopes R, Rauline G, Fourchet F, Hardy A. (2023). Development and Validation of the Ankle-GO Score for Discriminating and Predicting Return-to-Sport Outcomes After Lateral Ankle Sprain. Sports Health. DOI: 10.1177/19417381231183647.
- (66) Servant G, Barrue-Belou S, Gojanovic B, Fourchet F. (2023). Éviter les biais cognitifs : exemple lors de l'évaluation quantifiée de la force musculaire. Rev Med Suisse 2023; 10.53738/REVMED.2023.19.835.
- (65) Weck M, Rockstroh C, Fourchet F. (2022). Physiotherapeutische Mobilisierung, muskuläre Kräftigung und Stabilisierung des diabetischen Fußes – bisher vernachlässigte Facetten der Therapie? Diabetes Stoffw Herz 2022;31: 29-35.
- (64) Tourillon R, Six A, Fourchet F, Morin JB. (2022). La différence de posture et de déformation de la morphologie du pied modifie elle la production de force en flexion plantaire et la cinétique de saut ? Entretiens de Podologie. 20-35.
- (63) Picot B, Hardy A, Terrier R, Tassignon B, Lopes R and Fourchet F. (2022). Which Functional Tests and Self-Reported Questionnaires Can Help Clinicians Make Valid Return to Sport Decisions in Patients With Chronic Ankle Instability? A Narrative Review and Expert Opinion. Front. Sports Act. Living 4:902886. doi: 10.3389/fspor.2022.902886
- (62) Martins, C.; Sayegh, S.; Faundez, A.; Fourchet, F.; Bothorel, H. (2022). Effectiveness of a Group-Based Rehabilitation Program Combining Education with Multimodal Exercises in the Treatment of Patients with Nonspecific Chronic Low Back Pain: A Retrospective Uncontrolled Study. Biology 2022, 11, 1508. doi.org/ 10.3390/biology11101508
- (61) Godin, A., Gremeaux, V., Servant, G., Besson, C., Fourchet, F., Mourot, L. (2022). Prévention et prise en charge de la blessure liée à la course à pied. Rev Med Suisse, 8, no. 798, 1874–1879.
- (60) Servant, G., Fourchet, F.; Pernoud, A.; Bothorel, H.; Christofilopoulos, P. (2022.) Evolution of Hip Muscles Strength in Femoroacetabular Impingement Patients Treated by Arthroscopy or Surgical Hip Dislocation: A Retrospective Exploratory Study. Biology 2022, 11, 1765. https://doi.org/10.3390/ biology11121765.
- (59) Benjamin D, Odof S, Abbès B, Fourchet F, Christiaen B, Taïar R. Shock Response Spectrum Analysis of Fatigued Runners. Sensors (2022). Mar 18;22(6):2350. doi: 10.3390/s22062350. PMID: 35336519.
- (58) Tourillon R, Bothorel H, McKeon P, Gojanovic B, Fourchet F. (2022). Effects of a single electrical stimulation session on foot force production, foot dome stability and dynamic postural control. J Athl Training. doi: 10.4085/1062-6050-0561.21.
- (57) Froideval et al. (Fourchet) (2021). Les drapeaux rouges en kiné du sport: définition et contextes. KSI SFMKS. 2ème Trimestre 2021: 4-6.
- (56) B Gojanovic, F Fourchet, V Gremeaux. (2021). Cognitive biases cloud our clinical decisions and patient expectations: A narrative review to help bridge the gap between evidence-based and personalized medicine. Ann Phys Rehabil Med. 18;65(4):101551. doi: 10.1016/j.rehab.2021.101551
- (55) B Picot, R Terrier, N Forestier, F Fourchet, PO McKeon. (2021). The Star Excursion Balance Test: An Update Review and Practical Guidelines. International Journal of Athletic Therapy and Training 26 (6), 285-293.
- (54) Fourchet F. (2021). Examen, diagnostic et traitement (de l'entorse et) de l'instabilité chronique de cheville. Kinésithér.Scient.,0632:25-29.
- (53) Tourillon R, Six A, Fourchet F, Morin JB. (2021). La différence de posture et de déformation de la morphologie du pied modifie-t-elle la production de force en flexion plantaire et la cinétique de saut ? Entretiens de Podologie Juin 2021. pp 20–35.
- (52) Smith MD, B Vicenzino, R Bahr, et al. (F Fourchet) (2021). Return to sport decisions after an acute lateral ankle sprain injury: introducing the PAASS framework—an international multidisciplinary consensus. Br J Sports Med 2021;55:1270–1276.



- (51) F Fourchet, O Materne, A Rejeb, C Horobeanu, A Seurot, M Farooq (2020). Mesure de la bascule pelvienne sagittale à l'aide d'un compas inclinomètre : fiabilité des mesures neutre, antérieure et postérieure chez de jeunes sportifs; Mains Libres 4 : 215-223.
- (50) D. Benjamin, S. Odof, B. Abbes, J.B. Nolot, D. Erre, F. Fourchet & R. Taiar (2020). Shock response spectrum analysis in running performance. Computer Methods in Biomechanics and Biomedical Engineering, 23:sup1, S28-S30, DOI:10.1080/10255842.2020.1811500.
- (49) Fourchet F et Servant G (2020). Je bouge... en courant sans me blesser. Collection Je bouge. Sous la direction du Pr Grégoire Millet. Ed. Médecine et Hygiène 2020.
- (48) Naderi A, Baloochi R, Dashti Rostam Ki, Fourchet F and Hans Degens (2020). Obesity and foot muscle strength are associated with high dynamic plantar pressure during running. The Foot doi.org/10.1016/j.jfoot.2020.101683.
- (47) Kraus K, Kraus E, Gojanovic B and Fourchet F (2020). Concurrent Validity of 2D and Inertial Goniometer Motion Assessment. International Journal of Athletic Therapy and Training, doi.org/10.1123/ijatt.2016-0056.
- (46) D. Benjamin, B. Abbes, S. Odof, J. B. Nolot, F. Fourchet, X. Chiementin & R. Taiar (2019). Harmonic decomposition and analysis of running gait. Computer Methods in Biomechanics and Biomedical Engineering, 22:sup1, S343-S344, DOI:10.1080/10255842.2020.1714937.
- (45) Tourillon R, Gojanovic B et Fourchet F (2019). How to Evaluate and Improve Foot Strength in Athletes: An Update. Frontiers in Sports and active living; doi.org/10.3389/fspor.2019.00046.
- (44) Degache F & Fourchet F (2019). Isocinétisme : grands principes méthodologiques. Mains Libres 2019 : 248-53.
- (43) Kwiatkowski B, Lutz N et Fourchet F (2019). Entorse de la cheville chez le jeune sportif. Rev Med Suisse 2019 ; 15 : 1318-22.
- (42) Rejeb A, Fourchet F, Materne O, et al. (2019). Beighton scoring of joint laxity and injury incidence in Middle Eastern male youth athletes: a cohort study. BMJ Open Sport & Exercise Medicine ; doi:10.1136/bmjsem-2018-000482.
- (41) Fourchet F, Maffiuletti N, Agosti F, et al. (2018). Impact of rocker sole footwear on plantar pressure distribution during standing and walking in adult obese women. Disability & Rehabilitation 25:1-4.
- (40) Delahunt E, Bleakley CM, Bossard DS, Fourchet F, et al. (2018). International Ankle Consortium Rehabilitation-Oriented Assessment: Infographics. Br J Sports Med 0:1-2.
- (39) Delahunt E, Bleakley CM, Bossard DS, Fourchet F et al. (2018). Clinical assessment of acute lateral ankle sprain injuries (ROAST): 2019 consensus statement and recommendations of the International Ankle Consortium. Br J Sports Med 52(20):1304-1310.
- (38) Rambaud A, Fourchet F, Neri T, Edouard P. (2018) Critères de retour au sport après reconstruction du ligament croisé antérieur : dernières recommandations de la littérature. Kine Scient. 600:19-22.
- (37) Broglin O, Fourchet F, Millet GP. (2017). Influence de la distance de course sur les blessures musculo-squelettiques en ultra-trail. Mains Libres Vol. 3:21-27.
- (36) Terrier R, Fourchet F, Degache F, Forestier N. (2017). Instabilité chronique de cheville et faiblesse des éverseurs : comment s'affranchir des limites de l'isocinétisme en pratique clinique quotidienne ? Kiné La Revue. Vol 17 - N° 184, pp 43-44. Doi : 10.1016/j.kine.2017.02.040.
- (35) Gojanovic B & Fourchet F (2017). The art of treating clearly: how to avoid the 'shazam' trap in sports medicine. Aspetar Journal Vol. 6:44-49.
- (34) Gardan N, Schneider A, Polidori G, Trenchard H, Seigneur J.M., Beaumont F, Fourchet F, Taiar R. (2017). Numerical investigation of the early flight phase in ski-jumping. Journal of Biomechanics 59:29-34.
- (33) Terrier R, Degache F, Fourchet F, Gojanovic B, Forestier N (2017). Assessment of evertor weakness in patients with chronic ankle instability: Functional versus isokinetic testing. Clinical Biomechanics 41:54-59.
- (32) Fourchet F (2016). Isocinétisme et cheville: bilans, rééducation et prévention en traumatologie. Guide d'isocinétisme - L'évaluation isocinétique des concepts aux conditions





sportives et pathologiques (Edouard P & Degache F) – © 2016 Elsevier SAS. Ed. Masson.

- (31) Fourchet F & Gojanovic B (2016). Foot core strengthening: relevance in injury prevention and rehabilitation for runners. *Swiss Sports & Exercise Medicine*, 64 (1):26-30.
- (30) Mahler P. B., Gojanovic B, Fourchet F, Mahler F (2016). What does 'preventive training' prevent in competitive sport? *Br J Sports Med* 50 (24):1488-1489.
- (29) Gojanovic B, Fourchet F, Mahler P. B., Mahler F. (2016). Can project management principles help the sports clinician manage return to play? *Br J Sports Med* 50 (24):1496-1505.
- (28) Gribble P. A., Bleakley C. M., Caulfield B. M., Docherty C. L., Fourchet F, Fong D. T., Hertel J, Hiller C. E., Kaminski T. W., McKeon P. O., Refshauge K. M., Verhagen E. A., Vicenzino B. T., Wikstrom E. A., Delahunt E. (2016). Evidence review for the 2016 International Ankle Consortium consensus statement on the prevalence, impact and long-term consequences of lateral ankle sprains. *Br J Sports Med* 50 (24):1496-1505.
- (27) Gribble P. A., Bleakley C. M., Caulfield B. M., Docherty C. L., Fourchet F, Fong D. T., Hertel J, Hiller C. E., Kaminski T. W., McKeon P. O., Refshauge K. M., Verhagen E. A., Vicenzino B. T., Wikstrom E. A., Delahunt E. (2016). 2016 consensus statement of the International Ankle Consortium: prevalence, impact and long-term consequences of lateral ankle sprains. *Br J Sports Med* 50 (24):1493-1495.
- (26) McKeon P. O. & Fourchet F (2015). Freeing the Foot: Integrating the Foot Core System into Rehabilitation for Lower Extremity Injuries. *Clin Sports Med* 34 (2):347-361.
- (25) Fourchet F, James D, McKeon P.O. (2015). To what extent does intrinsic foot muscle strengthening enhance rehabilitation outcomes for ankle sprain? In: *Quick Questions in Ankle Sprains: Expert Advice in Sports Medicine* © 2015 SLACK Incorporated; pp 139-142.
- (24) Fourchet F, Kelly L, Horobeanu C, Loepelt H, Taiar R, Millet G.P. (2013). Impact of high intensity running on plantar flexor fatigability and plantar pressure distribution in adolescent runners. *Journal of Athletic Training*, 50(2):117-25.
- (23) Fourchet F, Girard O, Kelly L, Horobeanu C, Millet G.P. (2014). Changes in leg spring behaviour, plantar loading and foot mobility magnitude induced by a treadmill exhaustive run in adolescent middle-distance runners. *Journal of Science and Medicine in Sport* 18(2):199-203.
- (22) Gribble PA, Delahunt E, Bleakley C, Caulfield B, Docherty C, Fourchet F, Fong DTP, Hertel J, Hiller C, Kaminski T, McKeon P, Refshauge K, van der Wees P, Vicenzino B, Wikstrom E. (2013). Selection criteria for patients with chronic ankle instability in controlled research: a position statement of the International Ankle Consortium. *Journal of Athletic Training* Dec 2013 (212):43-46.
- (21) Fourchet F (2014). Peut-on prévenir certaines blessures du pied et de la cheville chez les adolescents en athlétisme? *Revue de l'Association des Entraîneurs Français d'Athlétisme (AEFA)* 543:29-34.
- (20) Gribble PA, Delahunt E, Bleakley C, Caulfield B, Docherty C, Fourchet F, Fong DTP, Hertel J, Hiller C, Kaminski T, McKeon P, Refshauge K, van der Wees P, Vicenzino B, Wikstrom E. (2013). Selection criteria for patients with chronic ankle instability in controlled research: a position statement of the International Ankle Consortium. *Br J Sports Med* 48 (13):1014-18.
- (19) Gribble PA, Delahunt E, Bleakley C, Caulfield B, Docherty C, Fourchet F, Fong DTP, Hertel J, Hiller C, Kaminski T, McKeon P, Refshauge K, van der Wees P, Vicenzino B, Wikstrom E. (2013). Selection criteria for patients with chronic ankle instability in controlled research: a position statement of the International Ankle Consortium. *J Orthop Sports Phys Ther* 43(8):585-591.
- (18) Fourchet F (2013). Isocinétisme et cheville : bilans, rééducation et prévention en traumatologie. *Mov Sport Sci/Science et Motricité* Number 85, 2014/3: 65-76.
- (17) Fourchet F (2013). Blessures du pied et de la cheville chez les jeunes athlètes : épidémiologie et effets de la fatigue sur la mécanique de la course. *Kiné Scientifique* 543:29-34.
- (16) Degache F, Guex K, Fourchet F, Tomazin K, Millet G.P, Morin JB, Millet G.Y.(2013). 5-hour hilly running changes in kinematic, kinetic and spring-mass behaviour. *Journal of Sports Sciences* 31(3):299-304.



- (15) Fourchet F, Materne O, Horobeanu C, Hudacek T, Buchheit M. (2013). Reliability of a novel procedure to monitor lower limb muscle groups flexibility in highly-trained adolescent athletes. *Physical Therapy in Sport* 14(1):28-34.
- (14) Materne O, Fourchet F, Hudacek T, & Buchheit, M. (2012). A novel method to monitor lower limb muscles flexibility in young elite athletes: is it examiner-dependent? *Proceedings of Science and Football VII*; edited by Hiroyuki Nunome, Barry Drust, Brian Dawson, Routledge: 434 pages.
- (13) Fourchet F, Millet G.P, Tomazin K, Guex K, Nosaka K, Edouard P, Degache F, Millet G.Y. (2012). Effects of a 5-hour hilly running bout on ankle dorsal and plantar flexors force and fatigability. *European Journal of Applied Physiology* 112(7):2645-52.
- (12) Fourchet F, Kelly L, Horobeanu C, Loepelt H, Taiar R, Millet G.P. (2012). Comparison of plantar pressure distribution in adolescent runners at low vs. high running velocity. *Gait & Posture* 35(4):685-7.
- (11) Guex K, Fourchet F, Loepelt H, Millet G.P. (2012). Passive Knee Extension Test to Measure Hamstring Tightness: Influence of Gravity Correction. *Journal of Sport Rehabilitation* 21(3):231-4.
- (10) Fourchet F, Kuitunen S, Girard O, Beard A.J, Millet G.P. (2011). Effects of combined foot-ankle electromyostimulation and resistance training on the in-shoe plantar pressure patterns during sprint in young athletes. *Journal of Sports Science and Medicine* 10(2):292-300.
- (9) Fourchet F, Horobeanu C, Loepelt H, Taiar R, Millet G.P. (2011). Foot-ankle injuries and maturation in young Track and Field athletes. *International Journal of Athletic Therapy & Training* 16(3):19-23.
- (8) Edouard P, Chatard J-C, Fourchet F, Collado H, Degache F, Leclair A, Rimauda D, Calmels P (2011). Invertor and Evertor Strength in Track and Field Athletes with Functional Ankle Instability. *Isokinetics and Exercise Science* 19:91-96.
- (7) Fourchet F, Kilgallon M, Loepelt H, Millet G.P. (2009). Plantar muscles electro-stimulation and navicular drop. *Science & Sports* 24(5):262-264.
- (6) Fourchet F, Kuitunen S, Girard O, Millet G.P. (2007). Comparison of foot plantar distribution between training and spikes shoes in young sprinters. *Science & Sports* 22(3-4):176-178.
- (5) Girard O, Eicher F, Fourchet F, Micallef J.P., Millet G.P. (2007). Effects of the playing surface on plantar pressures and potential injuries in tennis. *Br J Sports Med* 41(11):733-738.
- (4) Girard O, Eicher F, Fourchet F, Micallef J-P & Millet G.P. (2007) Effects of the playing surface on in-shoe foot loading patterns during tennis-specific movements. *Tennis Science and Technology III* (Edited by S. Miller & J. Capel-Davies), London: ITF, p.p. 199-206 (book chapter).
- (3) Fourchet F, Millet G.P. (Mars 2007). Tonification de l'arche médiale du pied par renforcement volontaire et électro-stimulation : effets sur les pressions plantaires chez de jeunes athlètes. *Sport Med'* 190, 4-5.
- (2) Fourchet F, Carcano Y, Bosch M. (2002). Physiotherapeutic support throughout a multi-day event - about the Junior National Athletics Team. *Sport Med'*.
- (1) Fourchet F (2001). Contribution to Michel GEDDA's Decision making in physiotherapy: identification, process, logic. Ed. Masson.

Bibliographie

1. Fong DTP, Hong YL, Chan LK, Yung PSH, Chan KM. A systematic review on ankle injury and ankle sprain in sports. *Sports Medicine*. 2007;37(1):73-94.
2. Fong DTP, Man CY, Yung PSH, Cheung SY, Chan KM. Sport-related ankle injuries attending an accident and emergency department. *Injury-International Journal of the Care of the Injured*. Oct 2008;39(10):1222-1227.
3. Hootman J, Dick R, Agel J. Epidemiology of collegiate injuries for 15 sports: summary and recommendations for injury prevention initiatives. *Journal of athletic training*. 2007;42(2):311-319.
4. Nelson A, Collins C, Yard E, Fields S, Comstock R. Ankle injuries among united states high school sports athletes, 2005–2006. *Journal of athletic training*. 2007;42(3):381-387.
5. Waterman B, Owens B, Davey S, Zacchilli M, Belmont P. The epidemiology of ankle sprains in the United States. *Journal of Bone and Joint Surgery. American Volume*. 2010;92(13):2279-2284.
6. McKay G, Goldie P, Payne W, Oakes B. Ankle injuries in basketball: injury rate and risk factors. *British journal of sports medicine*. 2001;35(2):103-108.
7. Doherty C, Delahunt E, Caulfield B, Hertel J, Ryan J, Bleakley C. The incidence and prevalence of ankle sprain injury: a systematic review and meta-analysis of prospective epidemiological studies. *Sports medicine (Auckland, N.Z.)*. Jan 2014;44(1):123-140.
8. Swenson D, Yard E, Fields S, Comstock R. Patterns of recurrent injuries among US high school athletes, 2005-2008. *American Journal of Sports Medicine*. 2009;37(8):1586-1589.
9. Yeung M, Chan K, So C. An epidemiological survey on ankle sprain. *British journal of sports medicine*. 1994;28:112-116.
10. Delahunt E, Coughlan GF, Caulfield B, Nightingale EJ, Lin CWC, Hiller CE. Inclusion Criteria When Investigating Insufficiencies in Chronic Ankle Instability. *Medicine and science in sports and exercise*. Nov 2010;42(11):2106-2121.
11. Hertel J. Functional anatomy, pathomechanics, and pathophysiology of lateral ankle instability. *Journal of athletic training*. 2002;37(4):364-375.
12. Hiller C, Kilbreath S, Refshauge K. Chronic ankle instability: evolution of the model. *Journal of athletic training*. 2011;46(2):133-141.
13. Gribble PA, Delahunt E, Bleakley C, et al. Selection criteria for patients with chronic ankle instability in controlled research: a position statement of the International Ankle Consortium. *British journal of sports medicine*. Jul 2014;48(13):1014-1018.
14. Gribble PA, Delahunt E, Bleakley C, et al. Selection criteria for patients with chronic ankle instability in controlled research: a position statement of the International Ankle Consortium. *The Journal of orthopaedic and sports physical therapy*. Aug 2013;43(8):585-591.
15. Gribble PA, Delahunt E, Bleakley CM, et al. Selection criteria for patients with chronic ankle instability in controlled research: a position statement of the International Ankle Consortium. *Journal of athletic training*. Jan-Feb 2014;49(1):121-127.
16. Hiller CE, Nightingale EJ, Raymond J, et al. Prevalence and Impact of Chronic Musculoskeletal Ankle Disorders in the Community. *Archives of physical medicine and rehabilitation*. Oct 2012;93(10):1801-1807.
17. Golditz T, Steib S, Pfeifer K, et al. Functional ankle instability as a risk factor for osteoarthritis: using T2-mapping to analyze early cartilage degeneration in the ankle joint of young athletes. *Osteoarthritis and cartilage / OARS, Osteoarthritis Research Society*. Oct 2014;22(10):1377-1385.
18. Hubbard-Turner T, Turner MJ. Physical Activity Levels in College Students With Chronic Ankle Instability. *Journal of athletic training*. Apr 21 2015.
19. Hubbard-Turner T, Wikstrom EA, Guderian S, Turner MJ. An Acute Lateral Ankle Sprain Significantly Decreases Physical Activity across the Lifespan. *Journal of sports science & medicine*. Sep 2015;14(3):556-561.
20. Simon JE, Docherty CL. Current health-related quality of life is lower in former Division I collegiate athletes than in non-collegiate athletes. *The American journal of sports medicine*. Feb 2014;42(2):423-429.

21. Arnold BL, Wright CJ, Ross SE. Functional ankle instability and health-related quality of life. *Journal of athletic training*. Nov-Dec 2011;46(6):634-641.
22. Houston MN, Hoch JM, Gabriner ML, Kirby JL, Hoch MC. Clinical and laboratory measures associated with health-related quality of life in individuals with chronic ankle instability. *Physical therapy in sport : official journal of the Association of Chartered Physiotherapists in Sports Medicine*. May 2015;16(2):169-175.
23. Houston MN, Hoch JM, Hoch MC. Patient-Reported Outcome Measures in Individuals With Chronic Ankle Instability: A Systematic Review. *Journal of athletic training*. Sep 2 2015.
24. Houston MN, Van Lunen BL, Hoch MC. Health-related quality of life in individuals with chronic ankle instability. *Journal of athletic training*. Nov-Dec 2014;49(6):758-763.
25. Knowles SB, Marshall SW, Miller T, et al. Cost of injuries from a prospective cohort study of North Carolina high school athletes. *Injury prevention : journal of the International Society for Child and Adolescent Injury Prevention*. Dec 2007;13(6):416-421.
26. Verhagen EA, van Tulder M, van der Beek AJ, Bouter LM, van Mechelen W. An economic evaluation of a proprioceptive balance board training programme for the prevention of ankle sprains in volleyball. *British journal of sports medicine*. Feb 2005;39(2):111-115.
27. Finch C, Owen N, Price R. Current injury or disability as a barrier to being more physically active. *Medicine and science in sports and exercise*. May 2001;33(5):778-782.
28. Telford A, Finch CF, Barnett L, Abbott G, Salmon J. Do parents' and children's concerns about sports safety and injury risk relate to how much physical activity children do? *British journal of sports medicine*. Dec 2012;46(15):1084-1088.
29. Andersen TE, Floerenes TW, Arnason A, Bahr R. Video analysis of the mechanisms for ankle injuries in football. *The American journal of sports medicine*. Jan-Feb 2004;32(1 Suppl):69s-79s.
30. Fong DT, Hong Y, Shima Y, Krosshaug T, Yung PS, Chan KM. Biomechanics of supination ankle sprain: a case report of an accidental injury event in the laboratory. *The American journal of sports medicine*. Apr 2009;37(4):822-827.
31. Gehring D, Wissler S, Mornieux G, Gollhofer A. How to sprain your ankle - a biomechanical case report of an inversion trauma. *Journal of biomechanics*. Jan 4 2013;46(1):175-178.
32. Kristianslund E, Bahr R, Krosshaug T. Kinematics and kinetics of an accidental lateral ankle sprain. *Journal of biomechanics*. Sep 23 2011;44(14):2576-2578.
33. Terada M, Gribble PA. Jump Landing Biomechanics During a Laboratory Recorded Recurrent Ankle Sprain. *Foot & ankle international*. Jul 2015;36(7):842-848.
34. Mok KM, Fong DT, Krosshaug T, et al. Kinematics analysis of ankle inversion ligamentous sprain injuries in sports: 2 cases during the 2008 Beijing Olympics. *The American journal of sports medicine*. Jul 2011;39(7):1548-1552.
35. Fong DT, Ha SC, Mok KM, Chan CW, Chan KM. Kinematics analysis of ankle inversion ligamentous sprain injuries in sports: five cases from televised tennis competitions. *The American journal of sports medicine*. Nov 2012;40(11):2627-2632.
36. FIBA: worldwide basketball player numbers. <http://www.fiba.com/pages/eng/fc/FIBA/quicFact/p/openNodeIDs/962/selNodeID/962/quicFacts.html>. Accessed December 18, 2015.

“ Depuis plus de 10 ans, SSK Formation a toujours eu à coeur de proposer aux kinésithérapeutes des stages de qualité, avec les meilleurs formateurs de la région. J'adresse un sincère merci à tous les lecteurs de cet ouvrage spécifique. Conçu pour vous par nos experts, ce manuel vous aidera à mettre en pratique un enseignement de haut niveau auprès de vos sportifs qui exigent l'excellence. À bientôt dans l'un de nos centres, pour continuer à vous accompagner dans nos meilleures formations. ”

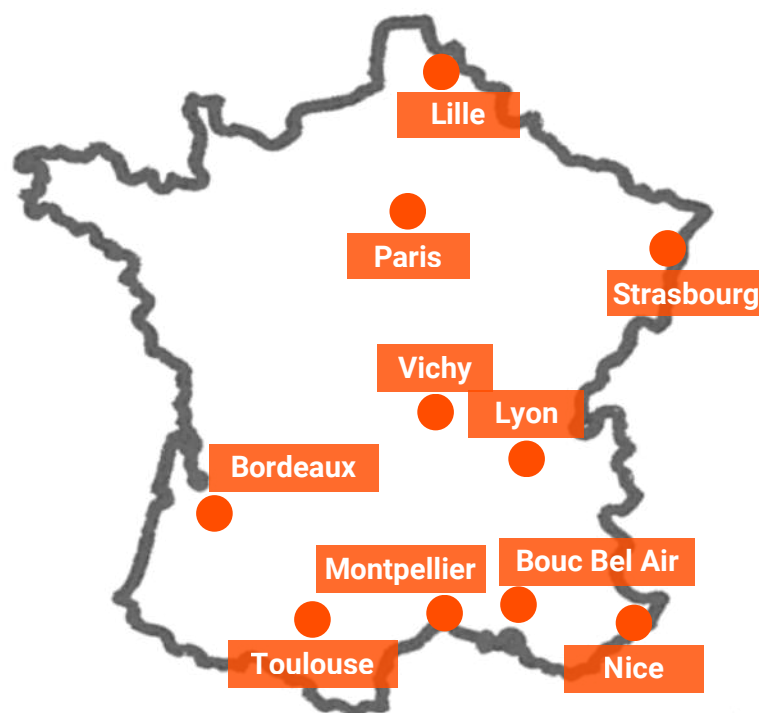
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