

# Prévalence de l'incontinence urinaire d'effort chez la sportive de haut niveau



Florence HAPILLON  
Masseur-Kinésithérapeute  
Anthy sur Léman



# INTRODUCTION



Incontinence urinaire : Perte d'urine involontaire

Incontinence urinaire d'effort : Perte d'urine involontaire à l'effort (rire, toux, éternuement, sport et autres activités physique), non précédée de la sensation de besoin

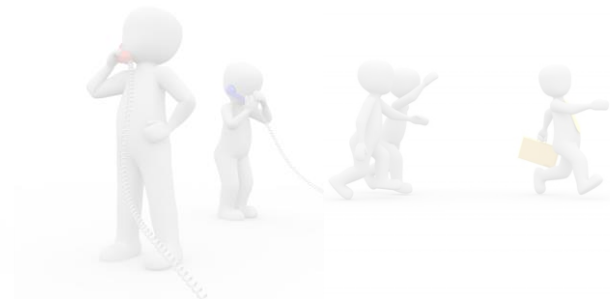
Incontinence urinaire par hyperactivité de vessie : perte involontaire d'urine, précédée par un besoin d'emblée urgent et non inhibé (besoin impérieux). Ces épisodes de fuite peuvent survenir au repos, la nuit, sans notion d'effort

Incontinence urinaire mixte : association des deux types précédents d'incontinence





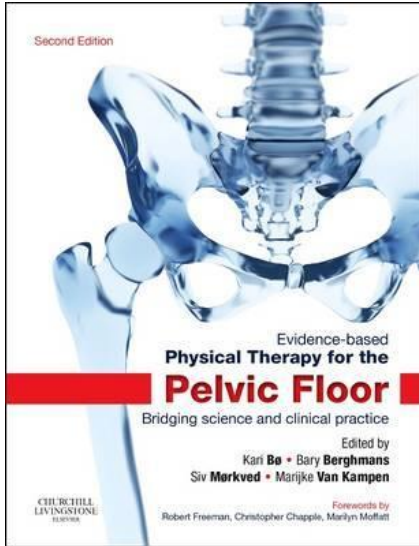
# INTRODUCTION



Âge  
Ménopause  
Atteinte d'une maladie chronique  
Homme blanc  
Obésité  
Nombre et type d'accouchement  
Poids du nouveau né  
Chirurgie gynécologique  
Constipation intestinale  
Consommation de drogue, tabac, caféine  
**Exercice...**



# INTRODUCTION



Kari Bø :

- ❑ Les muscles du plancher pelvien des sportives sont **compétents** mais **l'impact** élevé l'activité physique réalisée **augmente la pression intra-abdominale** les prédisposant à l'incontinence urinaire
- ❑ Les muscles du plancher pelvien des sportives sont **surchargés, étirés et faibles** à cause de **l'augmentation des pressions intra-abdominales** les prédisposant à l'incontinence urinaire



# INTRODUCTION



## IUE

IU, HAV, IUM, quantité, fréquence, dysurie, incontinence fécale, constipation, douleur périnéale, troubles sexuels, fonction du sport, fonction de l'impact du sport, fonction du volume d'entraînement, impact bio-psycho-social, mesures préventives et curatives



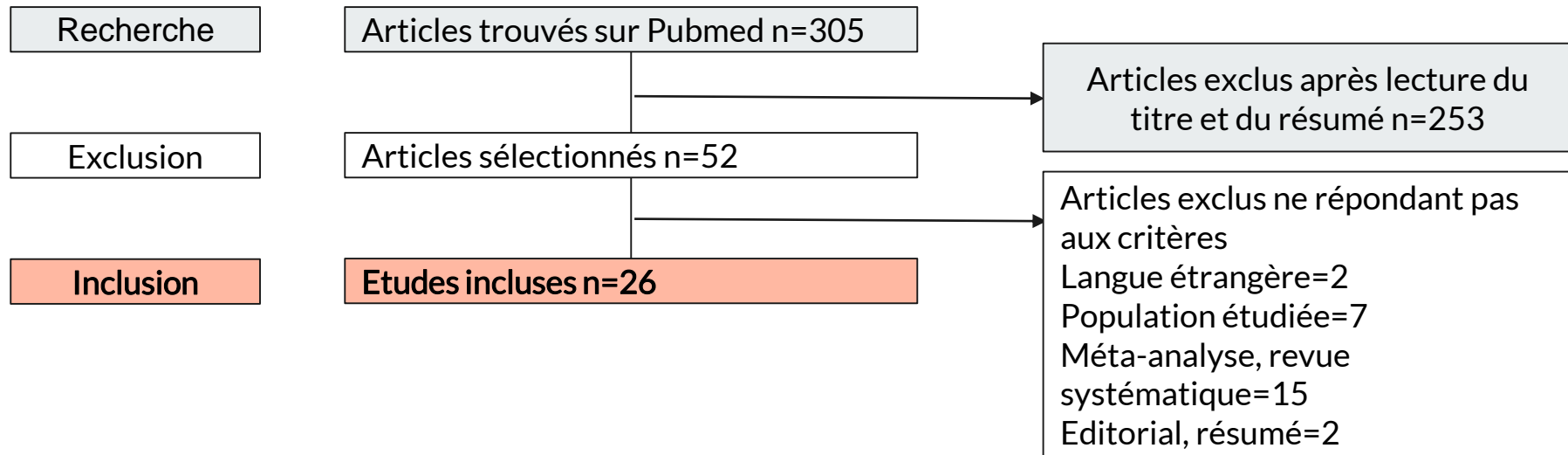
MÉTHODE

Pub**l**Med

“urinary incontinence AND sport”

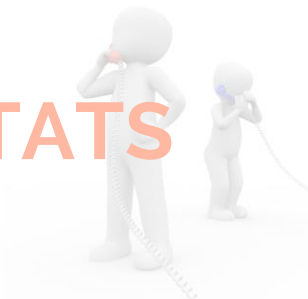


# MÉTHODE





# RÉSULTATS

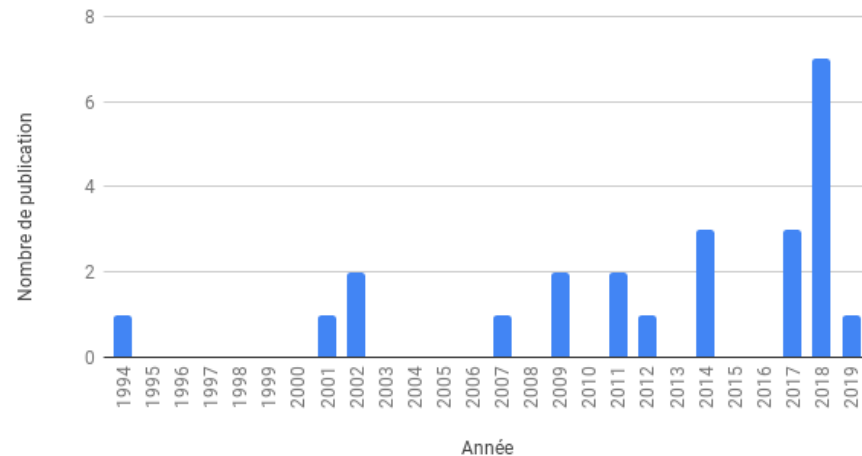


**26** études transversales dont **6** avec groupe contrôle

**23.6** ans âge moyen des sportives de haut niveau

**5675** sportives de haut niveau et **2073** non sportives de haut niveau

Nombre de publication par an depuis 1994







# ANALYSE



**IUE** 6.14% vs. 2.04% OR=3.49(1) à **80%** (2) selon les études

**IU** 14.3% (3) à **80%** (2) selon les études

**HAV** 3.8% (4) à **22.85%** (5) selon les études

**IUM** 0.8% (3) à **34.78%** (6) selon les études



- (1) Hagovska M, Svihra J, Bukova A, Horbacz A, Svihrova V. The impact of physical activity measured by the International Physical Activity questionnaire on the prevalence of stress urinary incontinence in young women, European Journal of Obstetrics and Gynecology (2018), <https://doi.org/10.1016/j.ejogrb.2018.07.011>
- (2) Eliasson K, Larsson T, & Mattsson E. Prevalence of stress incontinence in nulliparous elite trampolinists. Scand J Med Sci Sports, 2002, 12(2); p. 106–110
- (3) Hagovska M, Ján Š, Buková A, Horbacz A, Dračková D, Švihrová V, et al. Correction: Prevalence of Urinary Incontinence in Females Performing High-Impact Exercises. Int J Sports Med. mars 2017;38(3):e1
- (4) Carvalhais A, Natal Jorge R, Bo K. Performing high-level sport is strongly associated with urinary incontinence in elite athletes: a comparative study of 372 elite female athletes and 372 controls. Br J Sports Med. 22 juin 2017
- (5) Schettino MT, Mainini G, Ercolano S, Vascone C, Scalzone G, D'Assisi D, et al. Risk of pelvic floor dysfunctions in young athletes. Clin Exp Obstet Gynecol. 2014;41(6):671-6.
- (6) Amanda Maria Brito Cardoso, Cláudia Regina Oliveira De Paiva Lima & Caroline Wanderley Souto Ferreira (2018): Prevalence of urinary incontinence in high-impact sports athletes and their association with knowledge, attitude and practice about this dysfunction, European Journal of Sport Science, DOI: 10.1080/17461391.2018.1496146

# ANALYSE



## QUESTIONNAIRE SUBJECTIF

96.8% quelques gouttes (1)

90% quelques gouttes (2)

51.9% quelques gouttes (3)

44.0% quelques gouttes (4)

36.4% petites quantités (3) 20gr

24.8% petites quantités (4) 40gr

20% petite quantité (6)

11.4% grande quantité (6)

93.7% incontinence modérée (7)

- (1) Amanda Maria Brito Cardoso, Cláudia Regina Oliveira De Paiva Lima & Caroline Wanderley Souto Ferreira (2018): Prevalence of urinary incontinence in high-impact sports athletes and their association with knowledge, attitude and practice about this dysfunction, *European Journal of Sport Science*, DOI: 10.1080/17461391.2018.1496146
- (2) Carvalhais A, Natal Jorge R, Bø K. Performing high-level sport is strongly associated with urinary incontinence in elite athletes: a comparative study of 372 elite female athletes and 372 controls. *Br J Sports Med*. 22 juin 2017

(3) Jácome C, Oliveira D, Marques A, Sá-Couto P. Prevalence and impact of urinary incontinence among female athletes. *Int J Gynaecol Obstet Off Organ Int Fed Gynaecol Obstet*. juill 2011;114(1):60-

(4) BØ, K., and J. S. BORGÉN. Prevalence of stress and urge urinary incontinence in elite athletes and controls. *Med. Sci. Sports Exerc.*, Vol. 33, No. 11, 2001, pp. 1797-1802

(5) Kari Bø, Solfrid Bratland-Sanda, Jorunn Sundgot-Borgen. Urinary incontinence among group fitness instructors including yoga and pilates teachers. *Neurourology and urodynamics*. 30:370-373 (2011)

(6) K. Eliasson, T. Larsson, E. Mattsson. Prevalence of stress incontinence in nulliparous elite trampolinists. *Scand J Med Sci Sports* 2002; 12: 106-110

(7) Da Roza T, Brandão S, Mascarenhas T, Jorge RN, Duarte JA. Volume of training and the ranking level are associated with the leakage of urine in young female trampolinists. *Clin J Sport Med Off J Can Acad Sport Med*. mai 2015;25(3):270-5



# ANALYSE



Une fois	5%	22.22%			
Rarement	30%	22.22%	<b>61.4%</b>	44%	
<b>Parfois</b>	<b>55%</b>	<b>33.33%</b>	25%	<b>46,5%</b>	
Fréquent	20%	22.22%		9.8%	
	(1)	(2)	(3)	(4)	
<b>1/mois</b>	17.3%			<b>74.19%</b>	<b>50.8%</b>
<b>1/semaine</b>	<b>80,8%</b>	<b>81%</b>	<b>62,7%</b>		
2-3/semaine		12.12%			
1/jour	1,9%	6.4%			
Tout le temps			2.7%		
	(5)	(6)	(7)	(8)	(9)

(1) Nygaard IE, Thompson FL, Svengalis SL, Albright JP. Urinary incontinence in elite nulliparous athletes. *Obstet Gynecol*. août 1994;84(2):183-7

(2) Santos ES, Caetano AS, Tavares MCGCF, Lopes MHBM. Urinary incontinence among physical education students. *Rev Esc Enferm USP* 2009; 43(2):306-11

(3) Jácome C, Oliveira D, Marques A, Sâ-Couto P. Prevalence and impact of urinary incontinence among female athletes. *Int J Gynaecol Obstet Off Organ Int Fed Gynaecol Obstet*. juill 2011;114(1):60-

(4) Thyssen HH, Clevin L, Olesen S, Lose G. Urinary incontinence in elite female athletes and dancers. *Int Urogynecol J Pelvic Floor Dysfunct*. 2002;13(1):15-7

(5) Vitton V, Baumstarck-Barrau K, Brardjanian S, Caballe I, Bouvier M, Grimaud J-C. Impact of high-level sport practice on anal incontinence in a healthy young female population. *J Womens Health* 2002. mai 2011;20(5):757-63

(6) Kari Bø, Solfrid Bratland-Sanda, Jorunn Sundgot-Borgen. Urinary incontinence among group fitness instructors including yoga and pilates teachers. *Neurourology and urodynamics*. 30:370-373 (2011)

(7) Carvalhais A, Natal Jorge R, Bø K. Performing high-level sport is strongly associated with urinary incontinence in elite athletes: a comparative study of 372 elite female athletes and 372 controls. *Br J Sports Med*. 22 juin 2017

(8) Schettino MT, Mainini G, Ercolano S, Vascone C, Scalzone G, D'Assisi D, et al. Risk of pelvic floor dysfunctions in young athletes. *Clin Exp Obstet Gynecol*. 2014;41(6):671-6

(9) Amanda Maria Brito Cardoso, Cláudia Regina Oliveira De Paiva Lima & Caroline Wanderley Souto Ferreira (2018): Prevalence of urinary incontinence in high-impact sports athletes and their association with knowledge, attitude and practice about this dysfunction, *European Journal of Sport Science*, DOI: 10.1080/17461391.2018.1496146



ANALYSE



DYSURIE 23%<sup>(1)</sup> à 55.24%<sup>(2)</sup> en fonction des études

INCONTINENCE FÉCALE

14.8% vs. 4.9% OR=2.99<sup>(3)</sup> dont 80% gaz

CONSTIPATION



CONSTIPATION

36% vs. 29.9% non sign. (3)

(1) Poświata A, Socha T, Opara J. Prevalence of stress urinary incontinence in elite female endurance athletes. J Hum Kinet. 9 déc 2014;44:91-6

(2) Schettino MT, Mainini G, Ercolano S, Vascone C, Scalzzone G, D'Assisi D, et al. Risk of pelvic floor dysfunctions in young athletes. Clin Exp Obstet Gynecol. 2014;41(6):671-6

(3) Vitton V, Baumstarck-Barrau K, Brardjianian S, Caballe I, Bouvier M, Grimaud J-C. Impact of high-level sport practice on anal incontinence in a healthy young female population. J Womens Health 2002. mai 2011;20(5):757-63



# ANALYSE



**DOULEUR** 7%<sup>(1)</sup> à 52.38%<sup>(2)</sup> en fonction des études

**DYSPAREUNIES**

20.1% vs. 8.4% p=0.002<sup>(3)</sup>; OR=2.99<sup>(4)</sup> à 27.28%<sup>(5)</sup>

**FONCTION SEXUELLE**

44%<sup>(5)</sup> : 94% orgasme ou lubrification / 66% désir / 58% excitation / 34%

satisfaction ; non sign.<sup>(6)</sup>



(1) Nygaard IE, Thompson FL, Svengalis SL, Albright JP. Urinary incontinence in elite nulliparous athletes. *Obstet Gynecol.* août 1994;84(2):183-7

(2) Schettino MT, Mainini G, Ercolano S, Vascone C, Scalzone G, D'Assisi D, et al. Risk of pelvic floor dysfunctions in young athletes. *Clin Exp Obstet Gynecol.* 2014;41(6):671-6

(3) Vitton V, Baumstarck-Barrau K, Brardjanian S, Caballe I, Bouvier M, Grimaud J-C. Impact of high-level sport practice on anal incontinence in a healthy young female population. *J Womens Health* 2002. mai 2011;20(5):757-63

(4) Amanda Maria Brito Cardoso, Cláudia Regina Oliveira De Paiva Lima & Caroline Wanderley Souto Ferreira (2018): Prevalence of urinary incontinence in high-impact sports athletes and their association with knowledge, attitude and practice about this dysfunction, *European Journal of Sport Science*, DOI: 10.1080/17461391.2018.1496146

(5) dos Santos, K.M., Huyer da Roza, T., da Silva, L.L., Wolpe, R.E., da Silva Honório, Gesilani.Jú., Tonon da Luz, S.C., Female sexual function and urinary incontinence in nulliparous athletes: An exploratory study, *Physical Therapy in Sports* (2018), doi: 10.1016/j.ptsp.2018.06.004.

(6) Alane S, Heiner J, Liu N, Monga M. Horseback riding: impact on sexual dysfunction and lower urinary tract symptoms in men and women. *Urology* 2009;73:109-14.

# ANALYSE

24.1% (1)  
16.6% (2)  
14.7% OR=1.33 (3)  
66% (4)  
21% (5)  
67% (7)

12.2% (1)

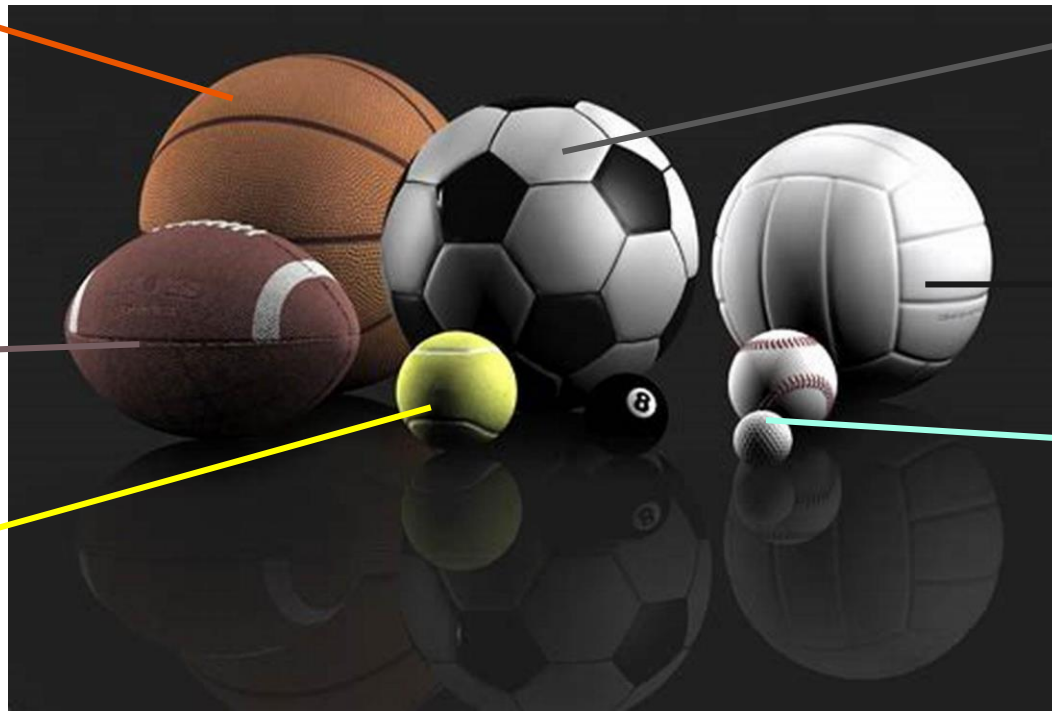
19% (1)  
0% (2 ; 3)  
50% (4)

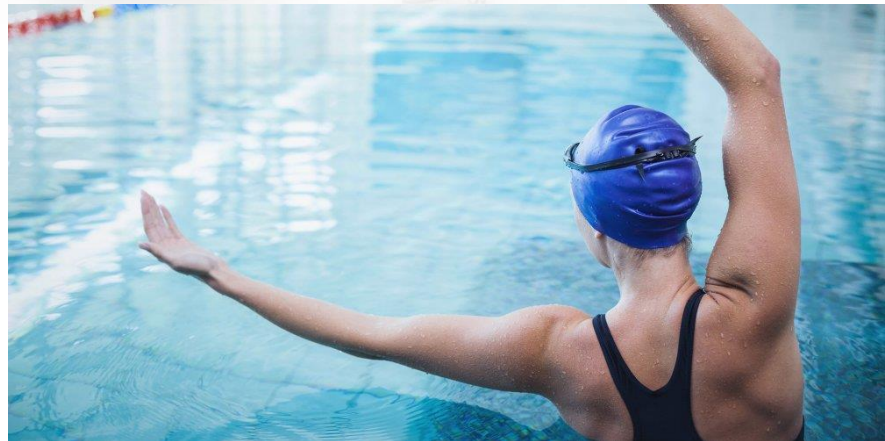
16.2% (1)  
0% (2)  
5% OR=0.37 (3)  
67% (7)

4.2% (1)  
0% (2)  
19.6% OR =2.16 (3)  
9% (4)  
30% (5)  
63% (7)

0% (4)

**HANDBALL**  
23.3% (1)  
20% (2)  
16.6% OR=1.57 (3)  
21% (5)  
73.3% (7)





0% (1)      10% (4)  
50% (2)    7.1% (6)

18.2% (1) natation synchronisé  
16.1% (1) waterpolo  
25% (2) aquagym  
19.5% (6) sport aquatique



# ANALYSE



11.1% (2)  
30% (4)  
19.5% (6)



18.2% (1)  
23.8% OR=2.58 (3)  
29% (4)  
25% (5)  
87.5% (7)

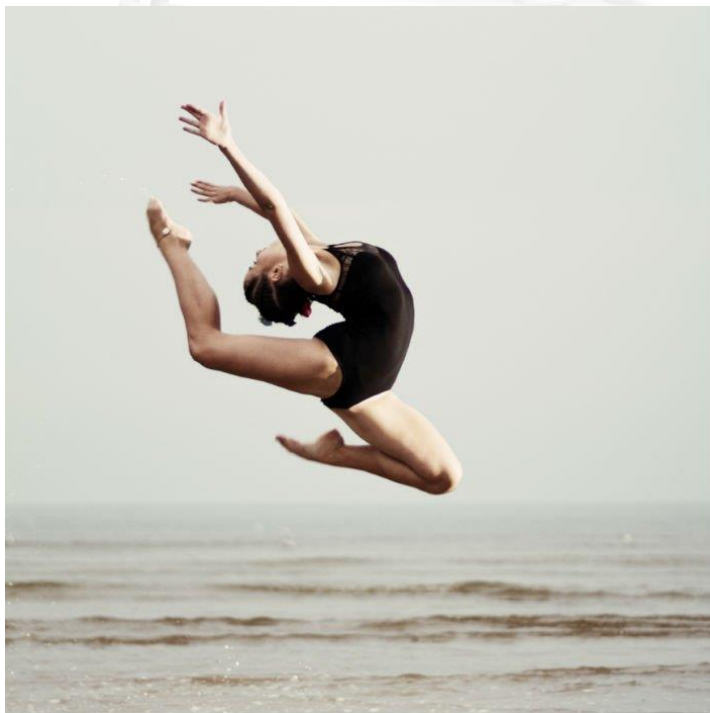


0% (2)  
12.1% (6)





# ANALYSE



**6.9% OR=0.48 (3) ; 30% saut jambe écart (4) ; 43% (5)**



**0% step (1); 15.6% fitness OR=1.44 (3); 32% aérobie (5) ; 14% musculation (6) ; 5.6% Pilates (6)**

# ANALYSE



82.4% (1)  
100% (2)  
80% (8)

22.2% (1)  
3.33% (2)  
67% (4)  
56% (5)



0% (1)  
8.33% (2)



# ANALYSE



## NOMBRE D'HEURE/SEMAINE

DÉPEND DES ÉTUDES : **significatif** (1, 2, 3, 4, 5, 6) // **non significatif** (7, 8, 9)

## NOMBRE D'ANNÉE DE PRATIQUE

DÉPEND DES ÉTUDES : **significatif** (3, 4, 10, 11) // **non significatif** (6, 9)

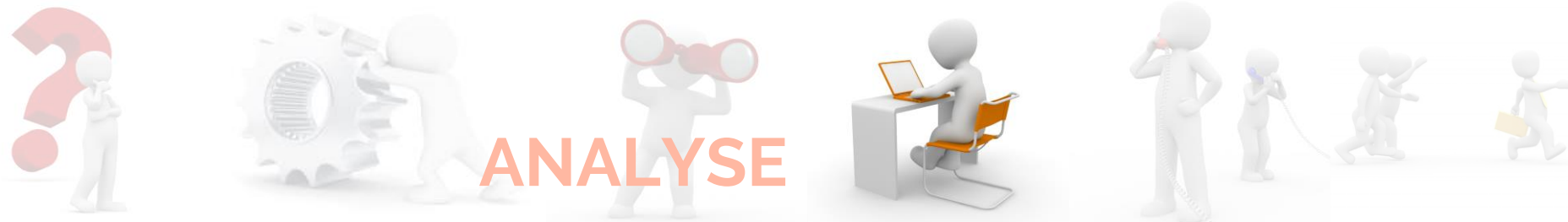
## NOMBRE D'ENTRAÎNEMENT/SEMAINE

**NON SIGNIFICATIF** (5, 11)

## HAUT/FAIBLE IMPACT

**SIGNIFICATIF** (1, 2, 13, 14)

WEEK	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
WEEK 1	<b>PUMP AND BURN</b> Les Mills Pump +30 mins.	<b>THE PRIMER</b> T25 Gamma +20 mins. <b>CORE 1</b> 22 Minute Hard Corps +22 mins.	<b>SHIRT INTERVALS</b> Intensity Max 30 +30 mins.	<b>HAMMER POWER</b> Hammer and Chisel +40 mins.	<b>PURE CARDS</b> Intensity +42 mins.	<b>PUMP AND BURN</b> Les Mills Pump +40 mins.	<b>DAY OFF</b>
WEEK 2	<b>CARDIO CHALLENGE</b> Intensity Max 30 +30 mins. <b>ABS 10 CLASS</b> Turbo Fire Deluxe +10 mins.	<b>THE CHALLENGE</b> P90X3 +30 mins.	<b>CARDIO FIRE EXTREME</b> 21 Day Fire Extreme +30 mins.	<b>TOTAL BODY HAMMER</b> Hammer and Chisel +44 mins.	<b>FRIDAY FIGHT: ROUND 1</b> Intensity Max 30 +30 mins.	<b>STRENGTH</b> Intensity Allium +47 mins.	<b>DAY OFF</b>
WEEK 3	<b>TABATA STRENGTH</b> Intensity Max 30 +30 mins. <b>AB ATTACK:10</b> Intensity Max 30 +10 mins.	<b>ECCENTRIC UPPER</b> P90X3 +30 mins.	<b>SPEED 1.0</b> T25 Gamma +30 mins. <b>AB RIPPER X2</b> P90X3 Elite +15 mins.	<b>DIRTY 10 EXTREME</b> 21 Day Fire Extreme +40 mins.	<b>PLYOMETRIC CARDIO</b> <b>CIRCUIT</b> Intensity +45 mins.	<b>PUMP REVOLUTION</b> Les Mills Pump +45 mins.	<b>DAY OFF</b>
WEEK 4	<b>TABATA POWER</b> Intensity Max 30 +30 mins.	<b>RIPT UP</b> T25 Gamma +20 mins. <b>10 MIN AB CHISEL</b> Hammer and Chisel +11 mins.	<b>HIIT 1 - POWER</b> Les Mills Combat +32 mins.	<b>HAMMER PLYOMETRICS</b> Hammer and Chisel +37 mins. <b>10 MIN AB HAMMER</b> Hammer and Chisel +13 mins.	<b>CARDIO POWER &amp; RESISTANCE</b> Intensity +44 mins.	<b>SPEED &amp; AGILITY</b> Intensity Allium +46 mins.	<b>DAY OFF</b>



#### DIAPO de 14 à 18

- (1) Carvalhais A, Natal Jorge R, Bø K. Performing high-level sport is strongly associated with urinary incontinence in elite athletes: a comparative study of 372 elite female athletes and 372 controls. *Br J Sports Med.* 22 juin 2017
- (2) Santos ES, Caetano AS, Tavares MCGCF, Lopes MHBM. Urinary incontinence among physical education students. *Rev Esc Enferm USP* 2009; 43(2):306-11
- (3) Hagovska M, Švihra J, Buková A, Dračková D, Švihrová V. Prevalence and risk of sport types to stress urinary incontinence in sportswomen: A cross-sectional study. *Neurourology and Urodynamics.* 2018;1-8.
- (4) Nygaard IE, Thompson FL, Svengalis SL, Albright JP. Urinary incontinence in elite nulliparous athletes. *Obstet Gynecol.* août 1994;84(2):183-7
- (5) Thyssen HH, Clewin L, Olesen S, Lose G. Urinary incontinence in elite female athletes and dancers. *Int Urogynecol J Pelvic Floor Dysfunct.* 2002;13(1):15-7
- (6) Fozzatti C, Riccetto C, Herrmann V, Brancalion MF, Raimondi M, Nascif CH, et al. Prevalence study of stress urinary incontinence in women who perform high-impact exercises. *Int Urogynecology J.* déc 2012;23(12):1687-91
- (7) Amanda Maria Brito Cardoso, Cláudia Regina Oliveira De Paiva Lima & Caroline Wanderley Souto Ferreira (2018): Prevalence of urinary incontinence in high-impact sports athletes and their association with knowledge, attitude and practice about this dysfunction, *European Journal of Sport Science*, DOI: 10.1080/17461391.2018.1496146
- (8) K. Eliasson, T. Larsson, E. Mattsson. Prevalence of stress incontinence in nulliparous elite trampolinists. *Scand J Med Sci Sports* 2002; 12: 106-110

#### DIAPO 20

- (1) dos Santos, K.M., Huyer da Roza, T., da Silva, L.L., Wolpe, R.E., da Silva Honório, Gesilani.Jú., Tonon da Luz, S.C., Female sexual function and urinary incontinence in nulliparous athletes: An exploratory study, *Physical Therapy in Sports* (2018), doi: 10.1016/j.ptsp.2018.06.004.
- (2) Alves JO, Luz STD, Brandão S, Da Luz CM, Jorge RN, Da Roza T. Urinary Incontinence in Physically Active Young Women: Prevalence and Related Factors. *Int J Sports Med.* nov 2017;38(12):937-41
- (3) Carvalhais A, Natal Jorge R, Bø K. Performing high-level sport is strongly associated with urinary incontinence in elite athletes: a comparative study of 372 elite female athletes and 372 controls. *Br J Sports Med.* 22 juin 2017
- (4) K. Eliasson, T. Larsson, E. Mattsson. Prevalence of stress incontinence in nulliparous elite trampolinists. *Scand J Med Sci Sports* 2002; 12: 106-110
- (5) Hagovska M, Ján Š, Buková A, Horbacz A, Dračková D, Švihrová V, et al. Correction: Prevalence of Urinary Incontinence in Females Performing High-Impact Exercises. *Int J Sports Med.* mars 2017;38(3):e1
- (6) Logan BL, Foster-Johnson L, Zotos E. Urinary incontinence among adolescent female athletes. *J Pediatr Urol.* 24 févr 2018
- (7) Schettino MT, Mainini G, Ercolano S, Vascone C, Scalzone G, D'Assisi D, et al. Risk of pelvic floor dysfunctions in young athletes. *Clin Exp Obstet Gynecol.* 2014;41(6):671-6
- (8) Fozzatti C, Riccetto C, Herrmann V, Brancalion MF, Raimondi M, Nascif CH, et al. Prevalence study of stress urinary incontinence in women who perform high-impact exercises. *Int Urogynecology J.* déc 2012;23(12):1687-91
- (9) Hagovska M, Švihra J, Buková A, Dračková D, Švihrová V. Prevalence and risk of sport types to stress urinary incontinence in sportswomen: A cross-sectional study. *Neurourology and Urodynamics.* 2018;1-8
- (10) Alaneé S, Heiner J, Liu N, Monga M. Horseback riding: impact on sexual dysfunction and lower urinary tract symptoms in men and women. *Urology* 2009;73:109-14.
- (11) Kari Bø, Solfrid Bratland-Sanda, Jorunn Sundgot-Borgen. Urinary incontinence among group fitness instructors including yoga and pilates teachers. *Neurourology and urodynamics.* 30:370-373 (2011)
- (12) Nygaard IE, Thompson FL, Svengalis SL, Albright JP. Urinary incontinence in elite nulliparous athletes. *Obstet Gynecol.* août 1994;84(2):183-7
- (13) Hagovska M, Švihra J, Buková A, Horbacz A, Švihrová V. The impact of physical activity measured by the International Physical Activity questionnaire on the prevalence of stress urinary incontinence in young women. *European Journal of Obstetrics and Gynecology* (2018), <https://doi.org/10.1016/j.ejogrb.2018.07.011>
- (14) Vitton V, Baumstarck-Barrau K, Brardjanian S, Caballe I, Bouvier M, Grimaud J-C. Impact of high-level sport practice on anal incontinence in a healthy young female population. *J Womens Health* 2002. mai 2011;20(5):757-63



**ANALYSE**



**ENTRAÎNEMENT**

**14%** <sup>(1)</sup> à **100%** <sup>(2)</sup> selon les études

**COMPÉTITION**

**0%** <sup>(1)</sup> à **51.2%** <sup>(3)</sup> selon les études

**EN FIN D'ENTRAÎNEMENT**

**60%** <sup>(2)</sup> à **84.1%** <sup>(4)</sup>



<sup>(1)</sup> Nygaard IE, Thompson FL, Svengalis SL, Albright JP. Urinary incontinence in elite nulliparous athletes. *Obstet Gynecol.* août 1994;84(2):183-7

<sup>(2)</sup> K. Eliasson, T. Larsson, E. Mattsson. Prevalence of stress incontinence in nulliparous elite trampolinists. *Scand J Med Sci Sports* 2002; 12: 106-110

<sup>(3)</sup> Thyssen HH, Clevin L, Olesen S, Lose G. Urinary incontinence in elite female athletes and dancers. *Int Urogynecol J Pelvic Floor Dysfunct.* 2002;13(1):15-7

<sup>(4)</sup> Carvalhais A, Natal Jorge R, Bø K. Performing high-level sport is strongly associated with urinary incontinence in elite athletes: a comparative study of 372 elite female athletes and 372 controls. *Br J Sports Med.* 22 juin 2017



# ANALYSE



## PROBLÈME SOCIAL ET HYGIÉNIQUE

15%<sup>(1)</sup> à 51.4%<sup>(2)</sup> en fonction des études

## QUALITÉ DE VIE

DÉPEND DES ÉTUDES : significatif (3, 4) // non significatif (5,6)



## SPORT ET PERFORMANCE SPORTIVES

16%<sup>(7)</sup> à 39.1%<sup>(8)</sup> en fonction des études

- (1) BØ, K., and J. S. BORGÉN. Prevalence of stress and urge urinary incontinence in elite athletes and controls. *Med. Sci. Sports Exerc.*, Vol. 33, No. 11, 2001, pp. 1797–1802
- (2) K. Eliasson, T. Larsson, E. Mattsson. Prevalence of stress incontinence in nulliparous elite trampolinists. *Scand J Med Sci Sports* 2002; 12: 106–110
- (3) Hagovska M, Svihra J, Bukova A, Horbacz A, Svihrova V, The impact of physical activity measured by the International Physical Activity questionnaire on the prevalence of stress urinary incontinence in young women, *European Journal of Obstetrics and Gynecology* (2018). <https://doi.org/10.1016/j.ejogrb.2018.07.011>
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# ANALYSE

## PROTECTION

12%<sup>(1)</sup> à 34.3%<sup>(2)</sup> en fonction des études

sport 40%<sup>(3)</sup> à 65.7%<sup>(2)</sup> en fonction des études

## VIDANGE VÉSICALE PRÉVENTIVE

37%<sup>(4)</sup> à 100%<sup>(5)</sup> en fonction des études

## RESTRICTION HYDRIQUE

6.6%<sup>(6)</sup> à 15%<sup>(7)</sup> en fonction des études

(1) Amanda Maria Brito Cardoso, Cláudia Regina Oliveira De Paiva Lima & Caroline Wanderley Souto Ferreira (2018): Prevalence of urinary incontinence in high-impact sports athletes and their association with knowledge, attitude and practice about this dysfunction, *European Journal of Sport Science*, DOI: 10.1080/17461391.2018.1496146

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ANALYSE



EN A PARLÉ

8%<sup>(1)</sup> à 39.6%<sup>(2)</sup> en fonction des études

EN A PARLÉ AVEC UN PROF. DE SANTÉ

3.3%<sup>(3)</sup> à 4.5%<sup>(2)</sup> en fonction des études

RÉÉDUCATION

91% ne connaissent pas les exercices de Kegel (1)

4.6% ont réalisé des exercices de renforcement du plancher pelvien (3)

0% ont des connaissances pratiques et 0% ont vu un physiothérapeute (4)



- (1) Carls C. The prevalence of stress urinary incontinence in high school and college-age female athletes in the midwest: implications for education and prevention. Urol Nurs. févr 2007;27(1):21-4, 39
- (2) Jácome C, Oliveira D, Marques A, Sâ-Couto P. Prevalence and impact of urinary incontinence among female athletes. Int J Gynaecol Obstet Off Organ Int Fed Gynaecol Obstet. juill 2011;114(1):60
- (3) Thyssen HH, Clevin L, Olesen S, Lose G. Urinary incontinence in elite female athletes and dancers. Int Urogynecol J Pelvic Floor Dysfunct. 2002;13(1):15-7
- (4) Amanda Maria Brito Cardoso, Cláudia Regina Oliveira De Paiva Lima & Caroline Wanderley Souto Ferreira (2018): Prevalence of urinary incontinence in high-impact sports athletes and their association with knowledge, attitude and practice about this dysfunction, European Journal of Sport Science, DOI: 10.1080/17461391.2018.1496146





# DISCUSSION



*durée*  
*quantité*  
*prévalence*  
*troubles*  
**parler**  
*impact*  
*fréquence*  
*qualité*  
*sport associés*



# DIAPO DU LUNDI



scruter  
enquêter  
légitimité  
interrogation  
poser  
questionnement  
écouter  
sonder  
questionner  
répondre  
tâter  
examiner  
interrogatoire  
inquiets  
regard  
interviewer