



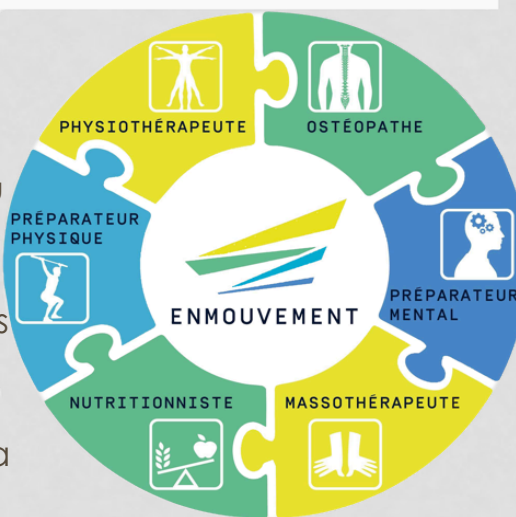

BILAN PERFORMANCE CNP

ENMOUVEMENT

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MON PARCOURS

- **Bachelor** en
Physiothérapie
- **Master en Sciences**
du mouvement et du
sport -entraînement
et performance, UNIL
- **IOC Diploma** in Sports
physical therapies.
Comité Olympique
- **MAS** en science de la
danse, Uni Bern



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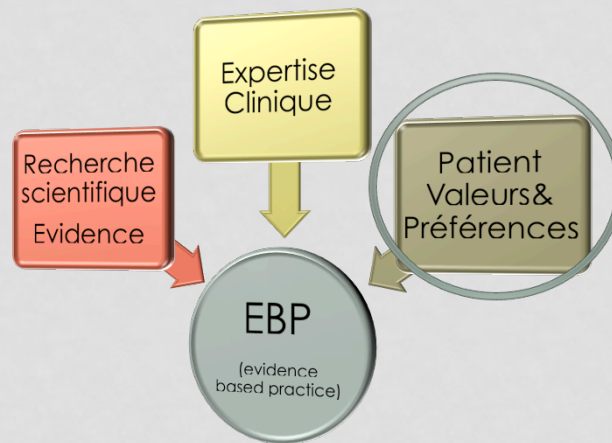
ENMOUVEMENT : UNE ÉQUIPE INTERDISCIPLINAIRE JEUNE ET DYNAMIQUE QUI OFFRE AU SPORTIF UN ACCOMPAGNEMENT SUR - MESURE DANS UN ESPACE DÉDIÉ À LA THÉRAPIE, À LA PRÉPARATION PHYSIQUE ET À LA FORMATION.



COMPRENDRE - OPTIMISER - PRÉVENIR



PRATIQUE FONDÉE SUR LES FAITS



5

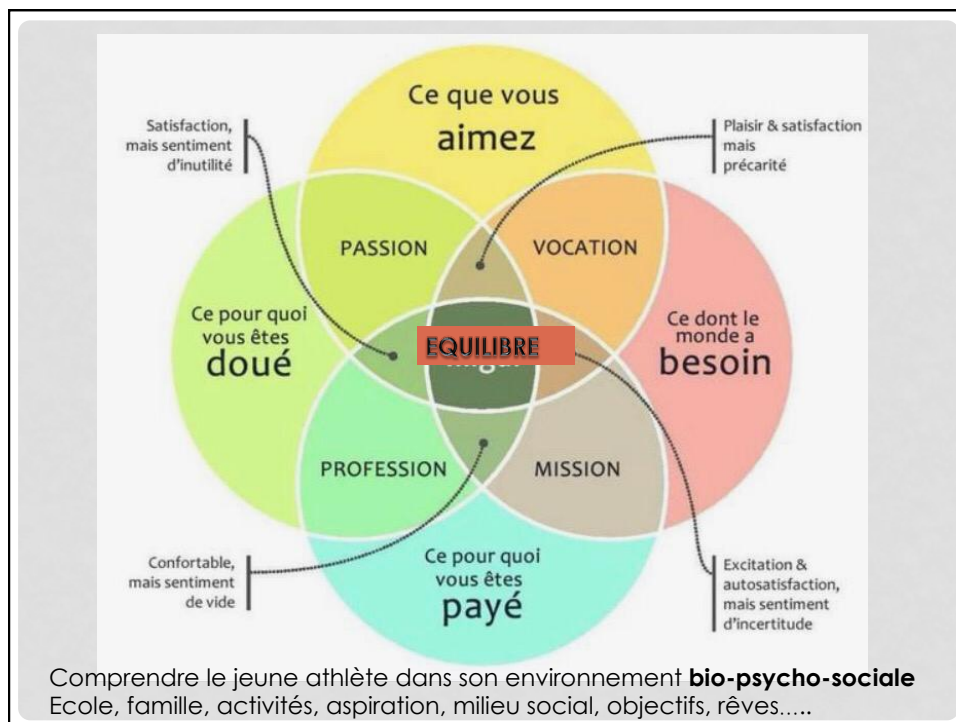
CROYANCES

I am not anxious.
I am just extremely well
educated about all
the things that
can go
catastrophically
wrong.



someecards
user card

6



COUCHES PAR COUCHES

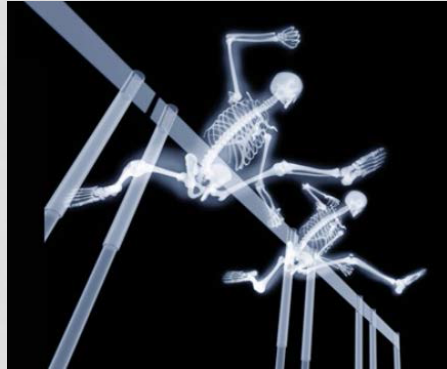
- Peau
- Tissus conjonctif (connective tissue)
- Fascias
- Muscles
- Tendons
- Articulations (capsule et ligaments)
- Artères, veines, système lymphatique
- Nerfs (dermatome) SNP
- SNC (cognitive)
- OS



Chaque structure anatomique a une fonction et un mouvement qui lui est propre!

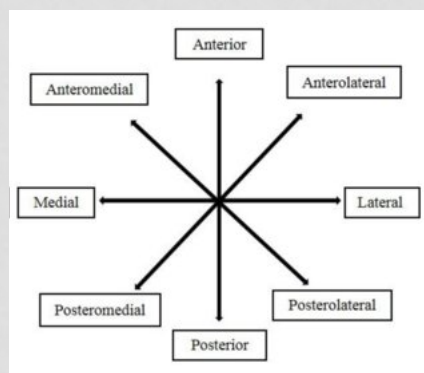
DIAGNOSTIQUE PERFORMANCE

- **Questionnaire santé**
 - Historique personnel & sportif
 - Historique blessure
- **Test de mobilité**
 - Articulations
 - Muscles
 - Nerfs
- **Test de contrôle moteur**
- **Discussion/ Education**



TEST MOBILITÉ

- Dos
- Bassin
- Hanches
- Genoux
- Chevilles

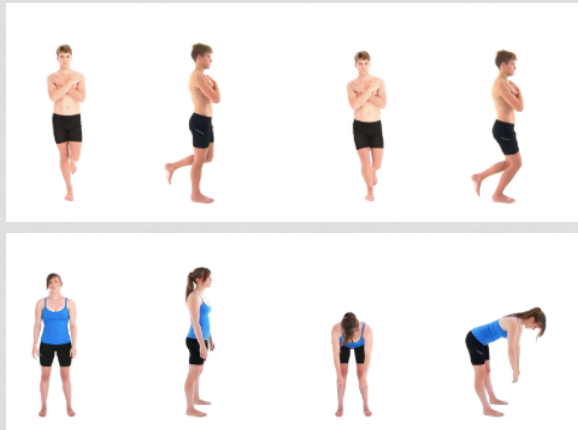


Objectif: liberté du mouvement dans **toutes les direction**

TEST CONTRÔLE MOTEUR

Kinetic control

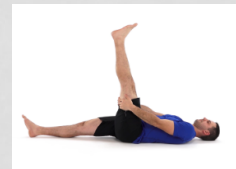
Objectif:
**contrôle et
qualité** du
mouvement



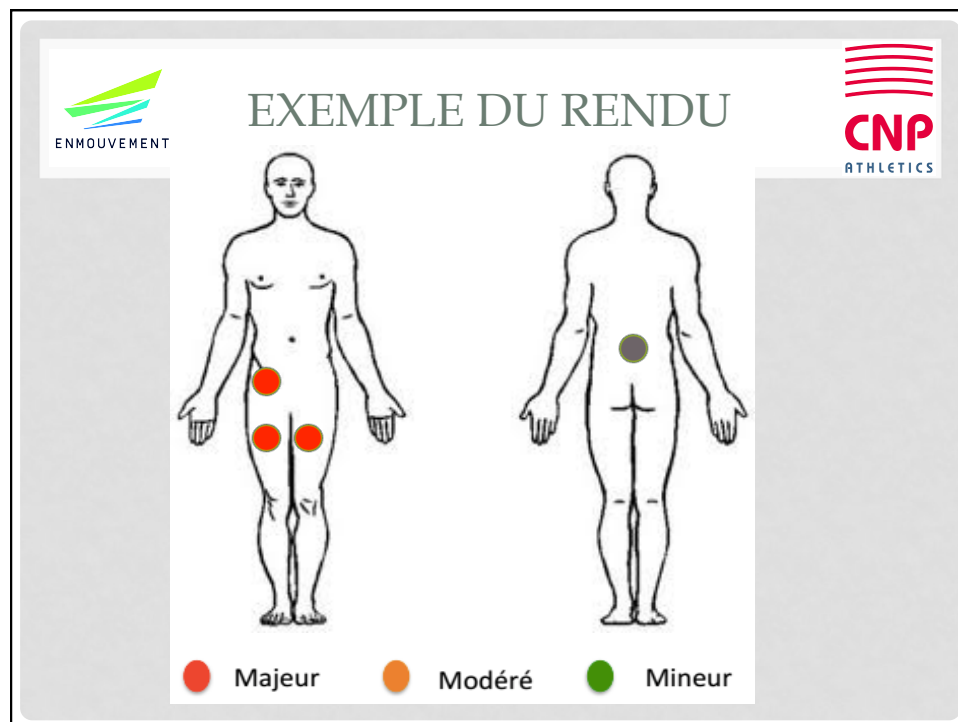
TEST EXTENSIBILITÉ

Tester la flexibilité – l'élasticité

- Musculaire
 - Fléchisseurs - extenseurs de hanche
 - Ischio Jambiers/quadriceps
 - ADD/ ABD
 - Gastrocnémiens
- Nerf: Evaluer la mobilité



Objectif: Un ratio musculaire équilibré



EXEMPLE OBJECTIFS

Travailler le contrôle moteur de hanche en Rotation interne

- Ex SKB en rotation
- Ex SKB avec MF

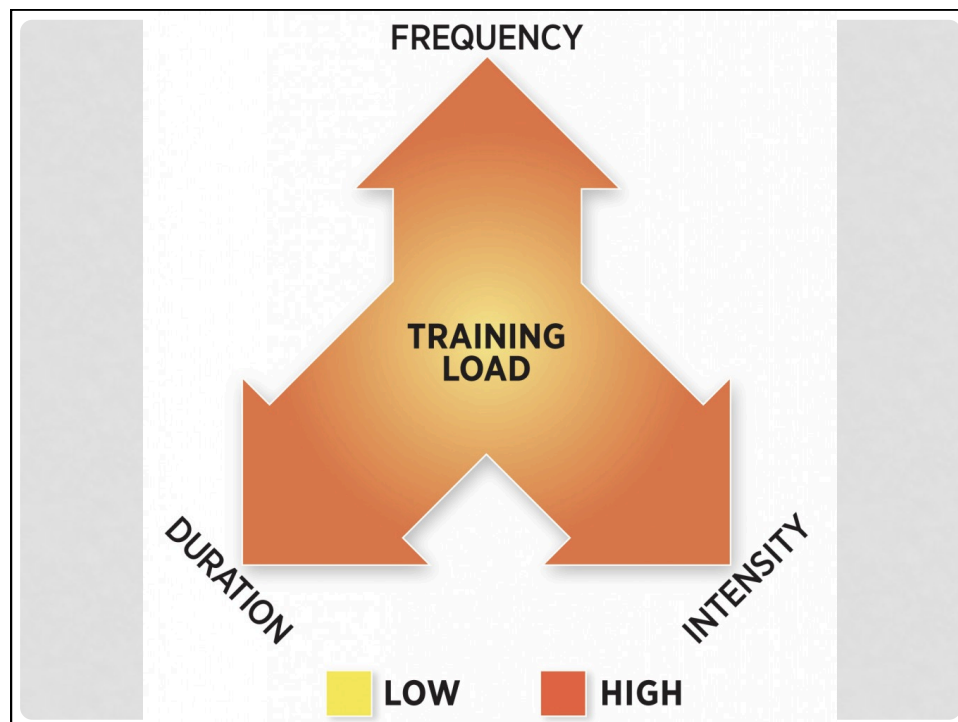
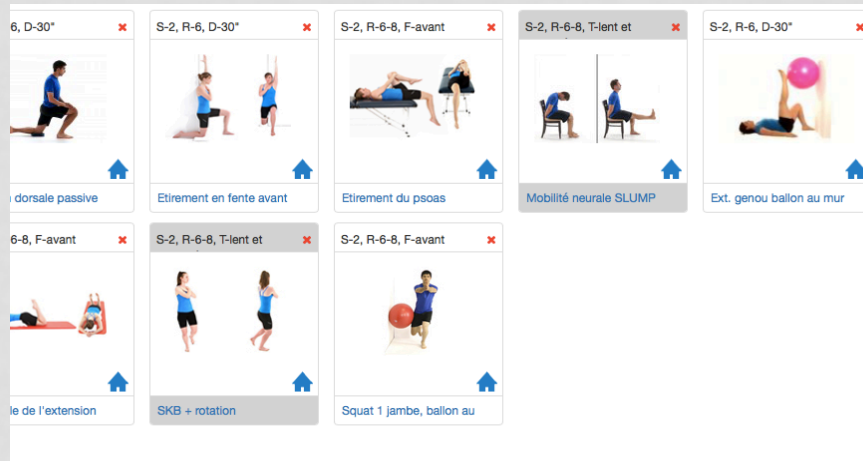
Travailler l'extensibilité des chaines musculaires antérieures

- Ex étirement en fente avant

Contrôle de la mobilité lombaire en extension

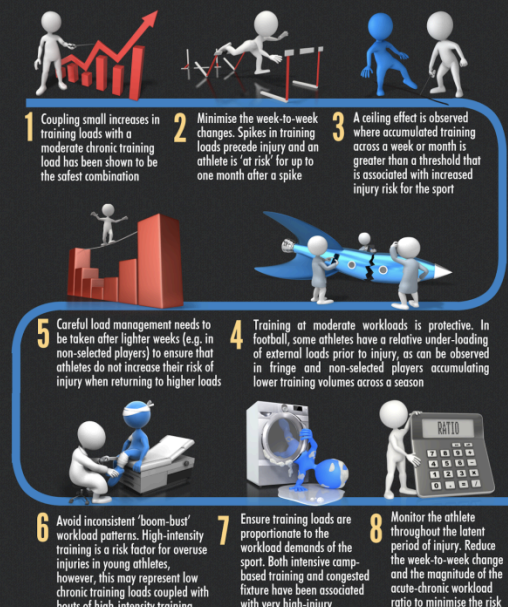
- Ex active prone knee bent

PLAN EXERCICE : APPLICATION



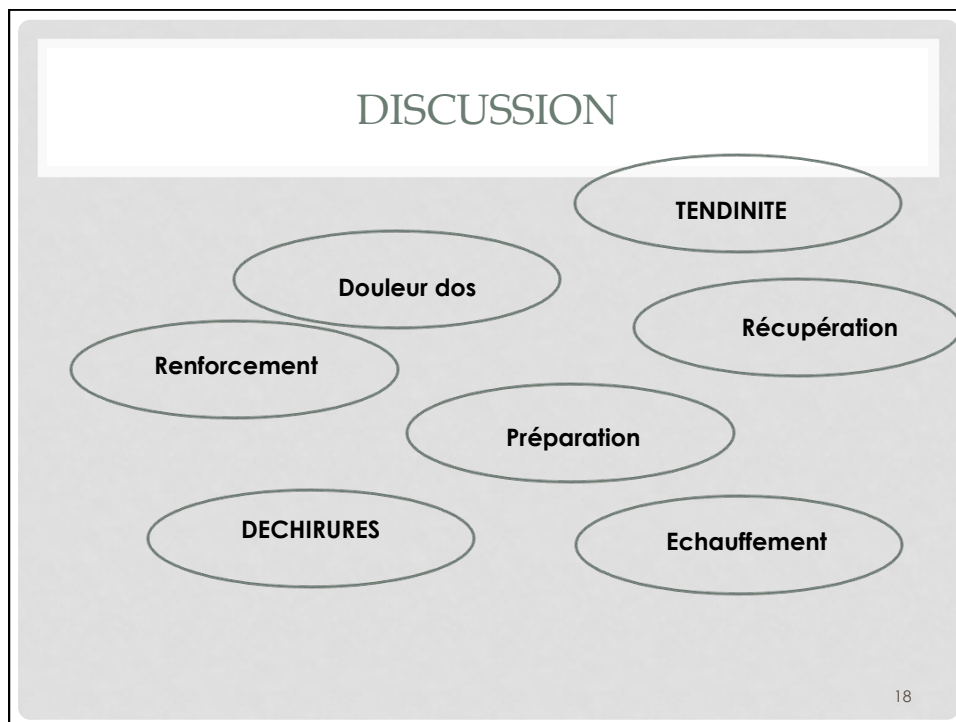
PREVENTION BASED ON RISK FACTORS FOR DEVELOPING A SPORTS INJURY

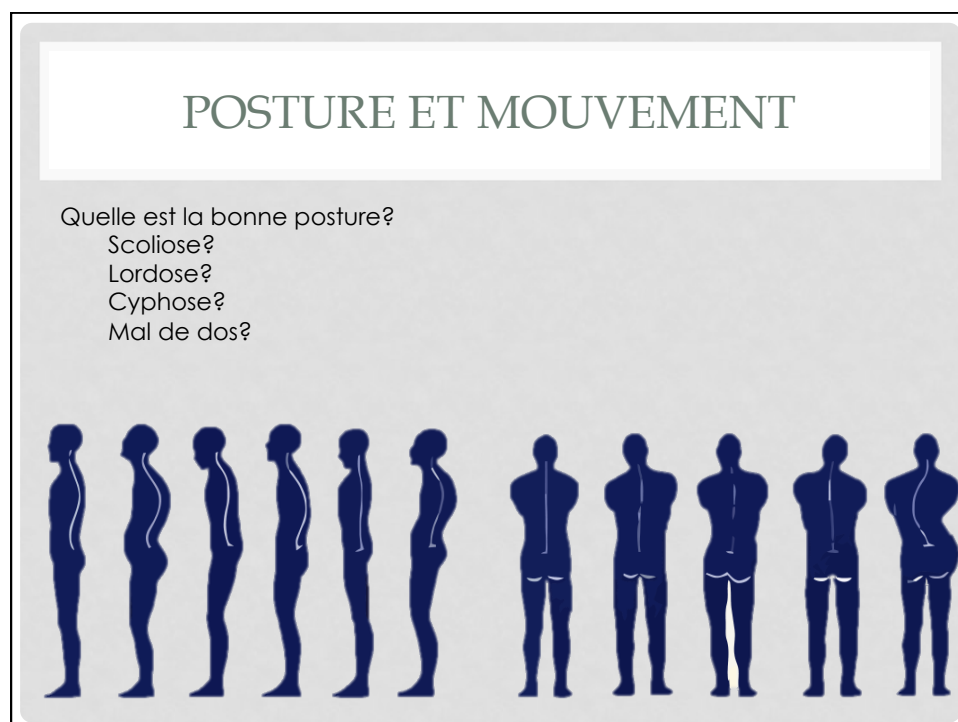
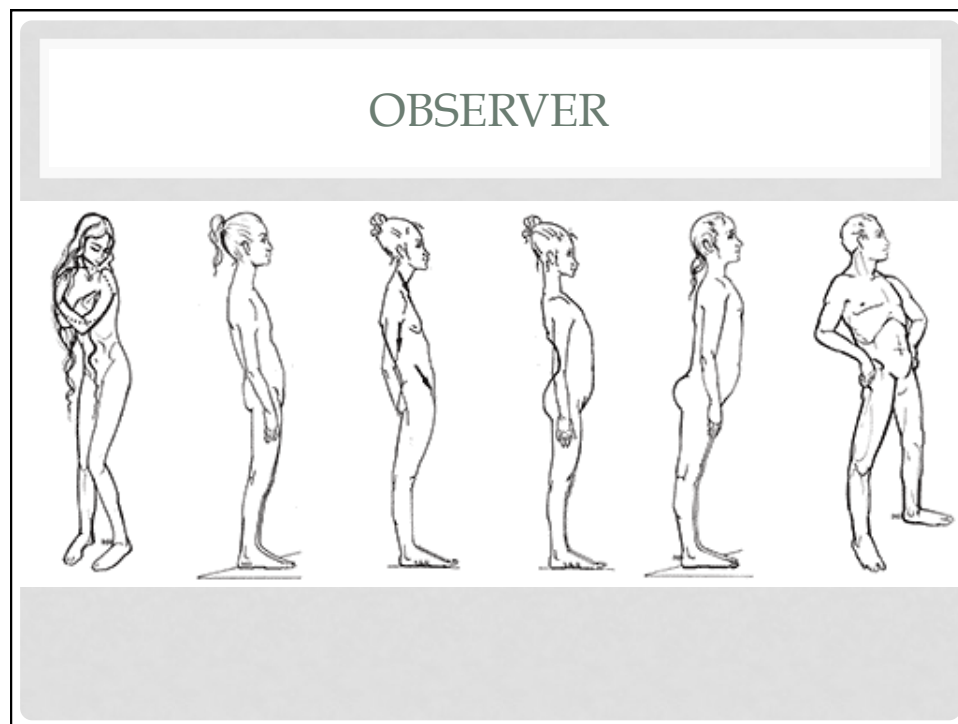
Reference: by Drew, Cook & Finch, BJSM 2016 Designed by eYLM SportScience

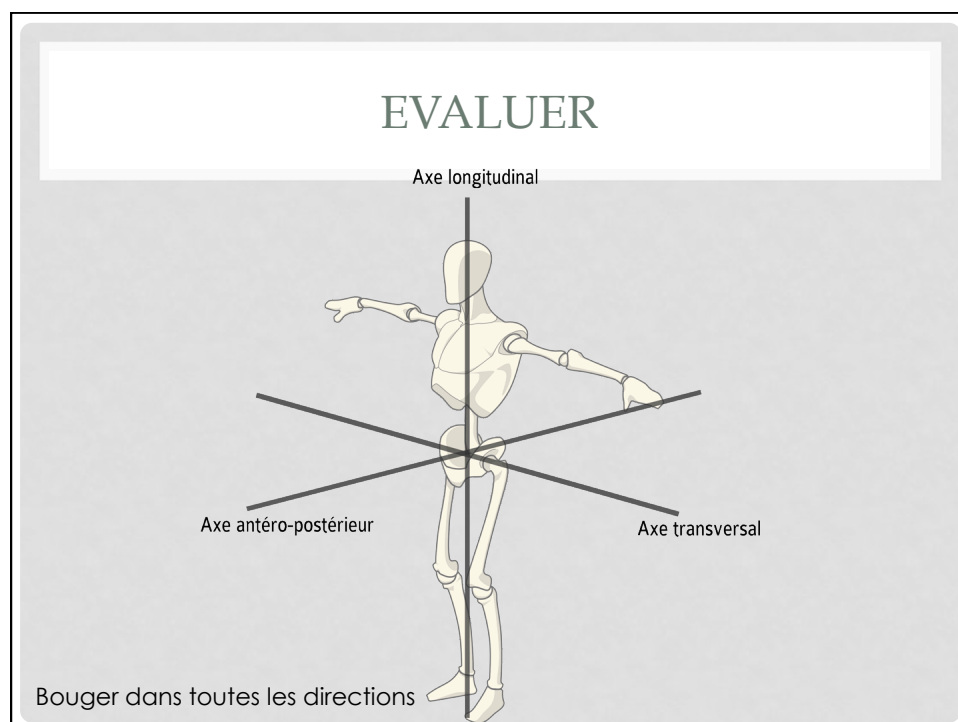
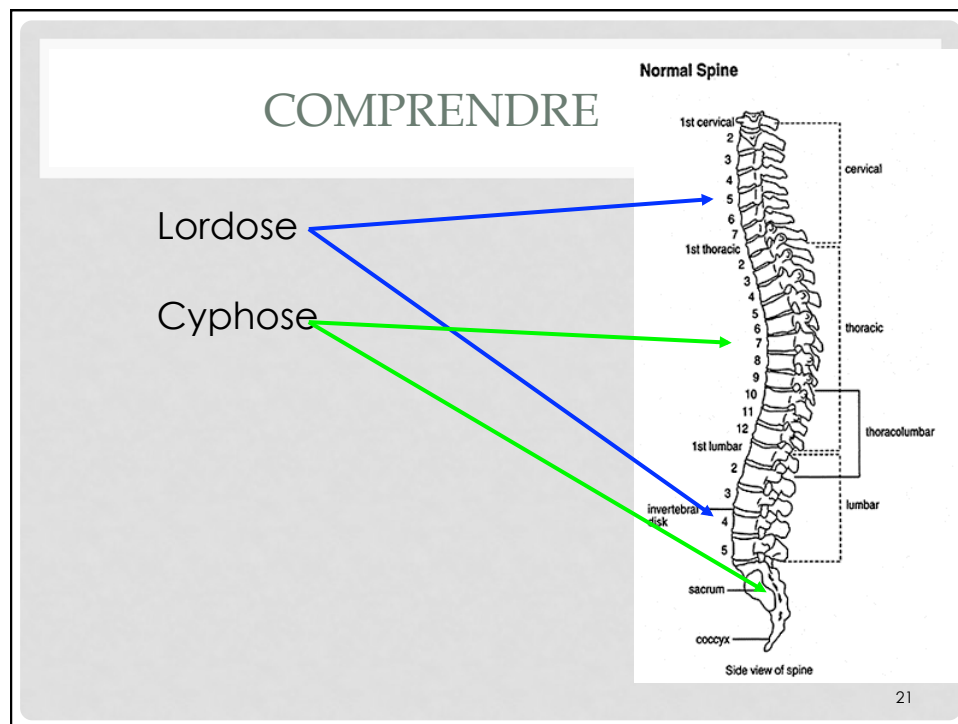


- 1** Coupling small increases in training loads with a moderate chronic training load has been shown to be the safest combination
- 2** Minimise the week-to-week changes. Spikes in training loads precede injury and an athlete is 'at risk' for up to one month after a spike
- 3** A ceiling effect is observed where accumulated training across a week or month is greater than a threshold that is associated with increased injury risk for the sport
- 4** Training at moderate workloads is protective. In football, some athletes have a relative under-loading of external loads prior to injury, as can be observed in fringe and non-selected players accumulating lower training volumes across a season
- 5** Careful load management needs to be taken after lighter weeks (e.g. in non-selected players) to ensure that athletes do not increase their risk of injury when returning to higher loads
- 6** Avoid inconsistent 'boom-bust' workload patterns. High-intensity training is a risk factor for overuse injuries in young athletes, however, this may represent low chronic training loads coupled with bouts of high-intensity training
- 7** Ensure training loads are proportionate to the workload demands of the sport. Both intensive camp-based training and congested fixture have been associated with very high-injury incidence
- 8** Monitor the athlete throughout the latent period of injury. Reduce the week-to-week change and the magnitude of the acute-chronic workload ratio to minimise the risk in this period

PERFORMANCE







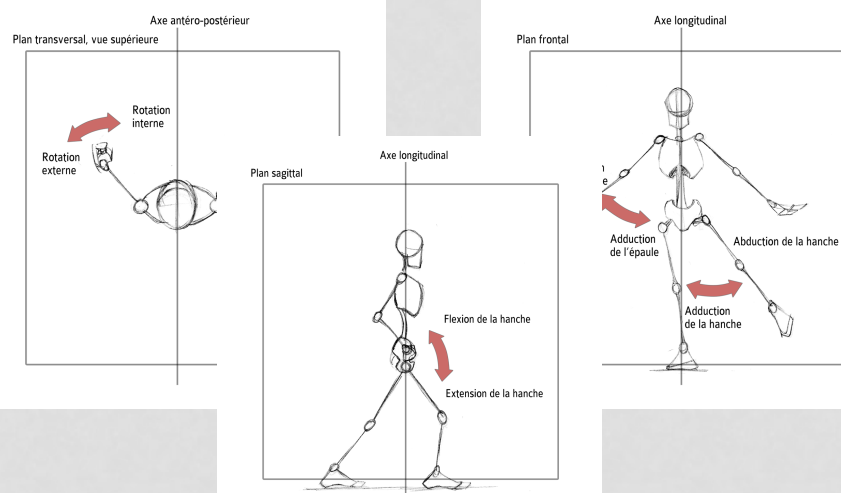
OPTIMISER

Qualité des Mouvements (physiologiques)

- **Flexion** (flexion antérieure)
- **Extension**
- **Inclinaison latérale** (flexion latérale gauche et droite)
- **Abduction Adduction** (membres)
- **Rotations**: rotation interne, rotation externe

Spécificité du geste technique

MOUVEMENTS

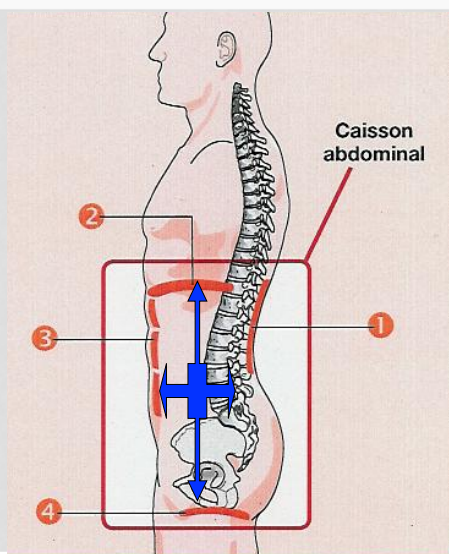


PRÉVENIR

- Lombalgie (douleur de dos)
- Déchirures musculaires (ischios, quadriceps)
- Tendinopathies (ischios, tendon d'achille)
- Périostites
- Entorses

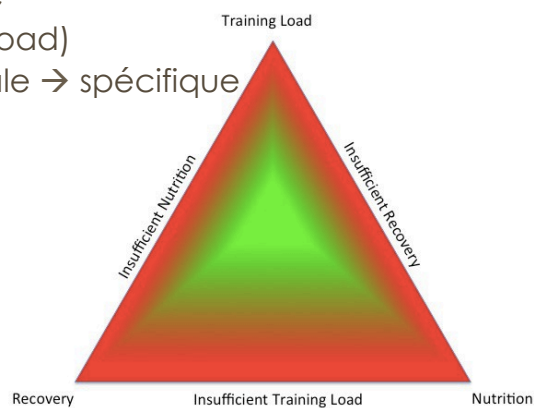
CONTRÔLE & STABILITÉ

- Diaphragme
- Périnée
- Psoas
- Abdominaux
 - Grand droit
 - Obliques
 - Transverse
- Multifides



CHARGE ENTRAINEMENT

- Echauffement (mobilité, étirement dynamique, contrôle moteur)
- Equilibre musculaire
- Dosage – charge (load)
- Préparation générale → spécifique
- Technicité
- Récupération
 - Hydratation
 - Alimentation
 - Mobilité active
 - Repos



HOW TO APPLY ATHLETIC RECOVERY STRATEGIES



1. Situation

Repeated sprint team sport has 48 hrs between 2 games



2. What is the aetiology of performance decline? Why are there decrements in muscle function and increases in soreness?

Multiple eccentric muscle contractions (decelerations) cause mechanical muscle damage



Exercise intensity and duration could cause stress and damage

Is there a recovery problem? With a basic recovery focus on sleep, rest and nutrition, will performance capabilities return to baseline in 48 hrs?



Research would suggest that following this type of exercise, indices of muscle function and muscle soreness are not fully recovered after 48 hrs, therefore recovery strategy focus justified

3. Which recovery strategies target the specific causes of reduced performance?

- A** Ensure energy substrate repletion and rehydration strategies are in place
- B** Minimise mechanical damage by ensuring a thorough warm up and adequate conditioning with prior exposure to sport-specific stimuli
- C** Prophylactically minimise oxidative damage. Antioxidant supplementation (e.g. cherry juice)
- D** Cold water immersion post match to limit secondary muscle damage via inflammatory mechanisms. Likely positive effects on muscle soreness
- E** Strategies to specifically minimise magnitude of muscle soreness. Compression garments, massage or neuromuscular stimulation



BASES Expert Statement by Howatson, Leeder & van Someren, 2016

Designed by ©YLM SportScience

PLACE A LA PRATIQUE



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