

MODULE 7

TENNIS PHYSICAL

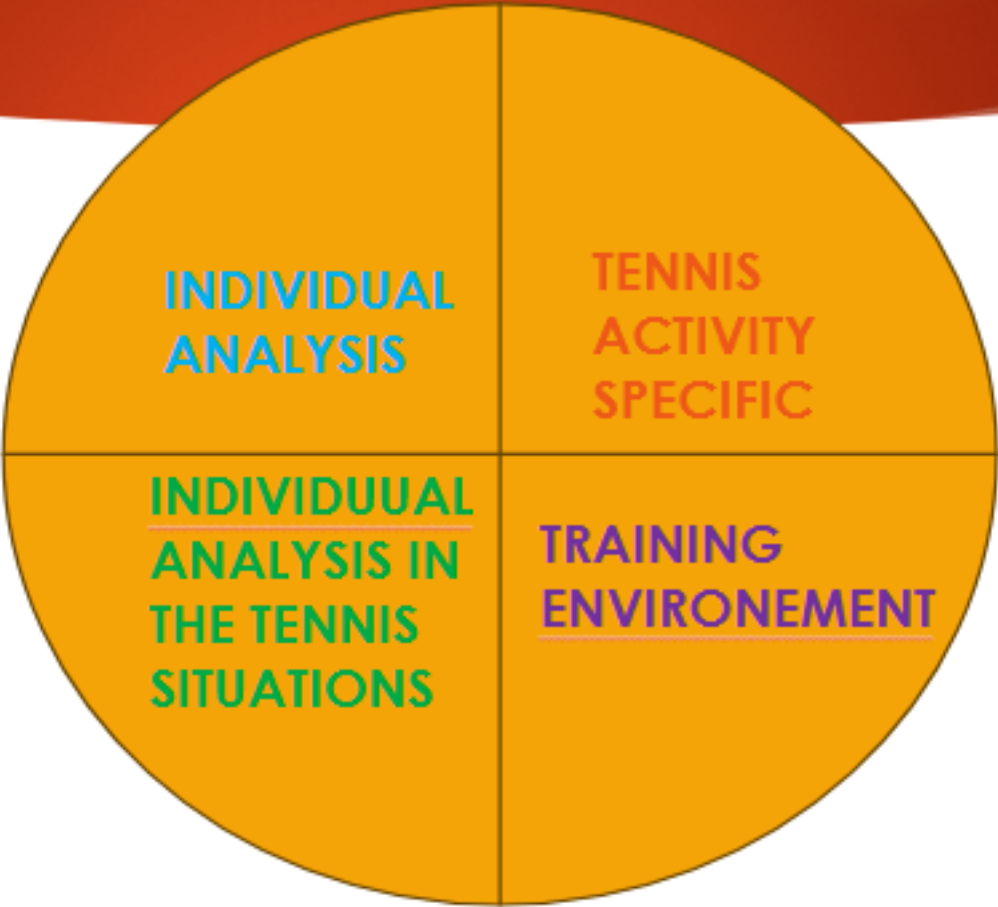
TRAINING PREFERENCES





INDIVIDUALIZATION PROCESS

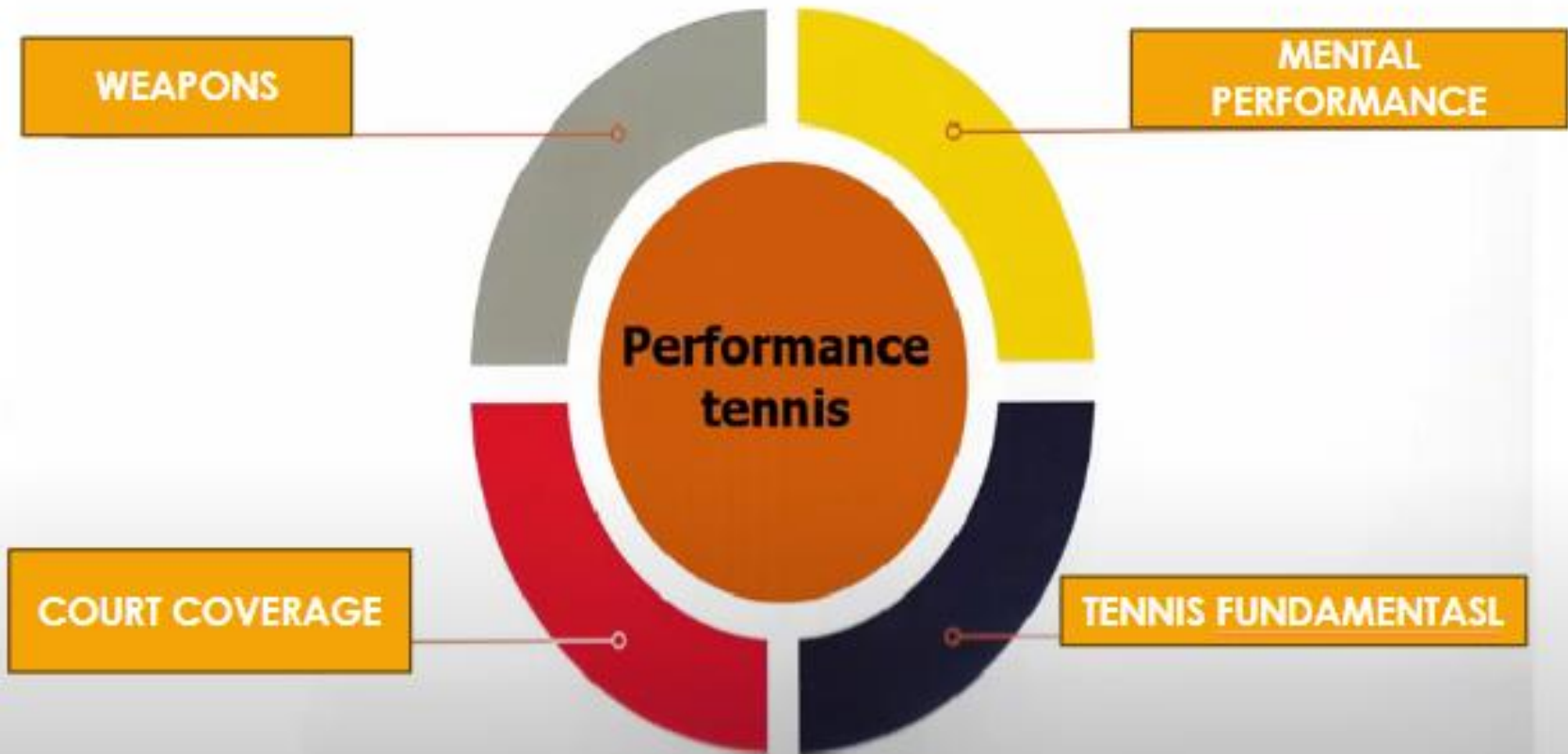
- Morphology/ anatomy
 - Motor preferences
 - Physical qualities
 - Style of play
 - Improvement axes
-
- Pleasure
 - Blockages
 - Dreams
 - Deep motivations



- Energy systems
 - Biomechanics
 - Technique
 - Strategy
 - tactic
-
- Parents
 - Coach/ staff
 - Training system
 - Material
 - Time



INDIVIDUALISATION PROCESS SYSTEMIC APPROACH





ENERGY PREFERENCES

**Aerobic system don't
exist without the
anaerobic system**

Speed differences

- Anaerobic player (faster)
- Aerobic player (slower)

Muscles fiber

white = fast fiber

Red = slow fiber



ENERGY PREFERENCES

OBSERVATION

TENNIS COURT

SEE HOW FAST IS THE PLAYER ON THE FIRST 2 STEPS

TEST

COUNTER MOVEMENT JUMP

HIGH JUMP/ FAST FIBER + 50 CMS

MEDIUM JUMP / 40 CMS JUM

LOW JUMP/ LOW / SLOW FIBER UNDER 30 CMS

MENS

DÉTENTE VERTICALE, HOMME

joueur fibres lentes

— > 52 cm

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35

— < 24 cm

WOMENS

DÉTENTE VERTICALE, FEMME

joueuse moyenne

— > 52 cm

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37

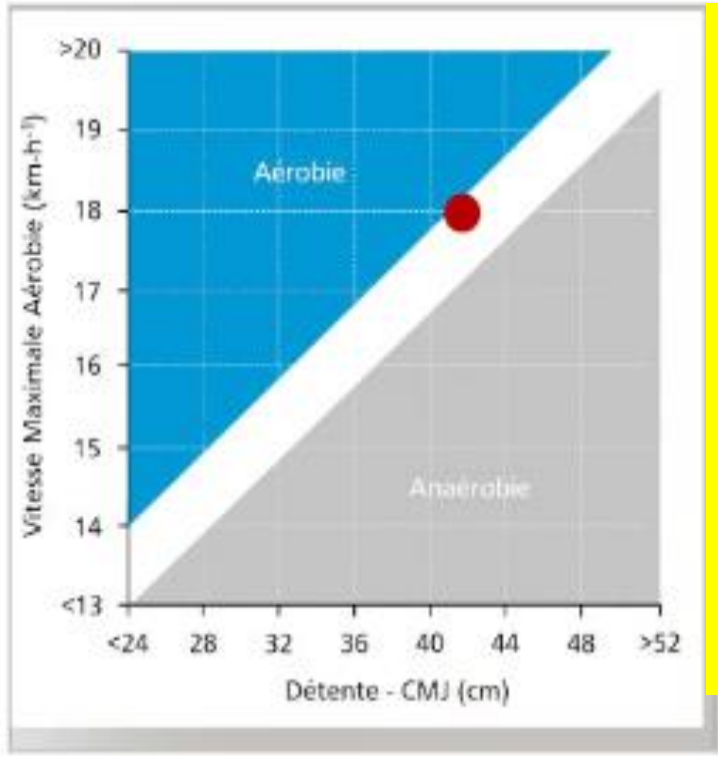
— < 24 cm



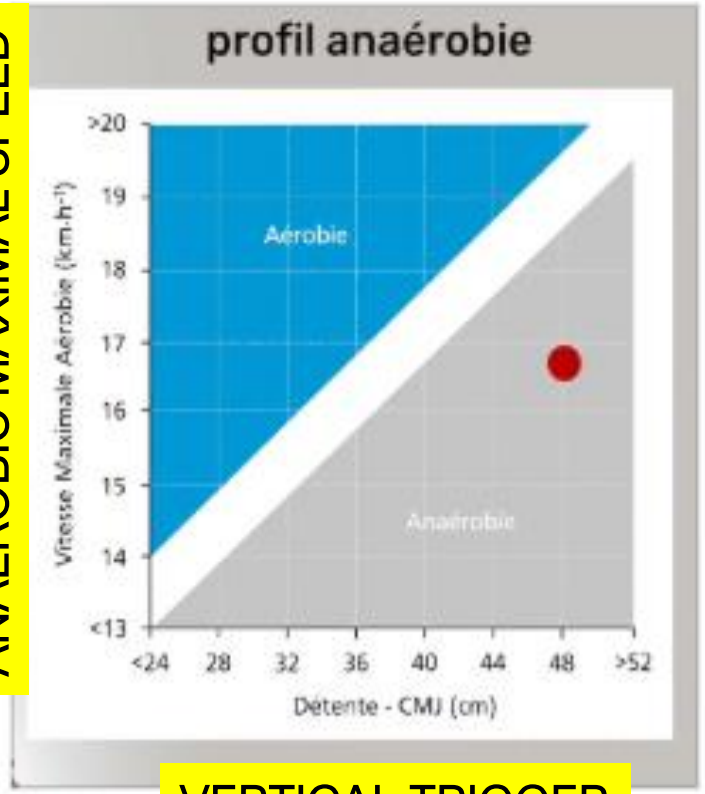
ENERGY PREFERENCES PROFILES

TENNIS PLAYER VMA = AVERAGE 18 MKS

ANAEROBIC PROFILE

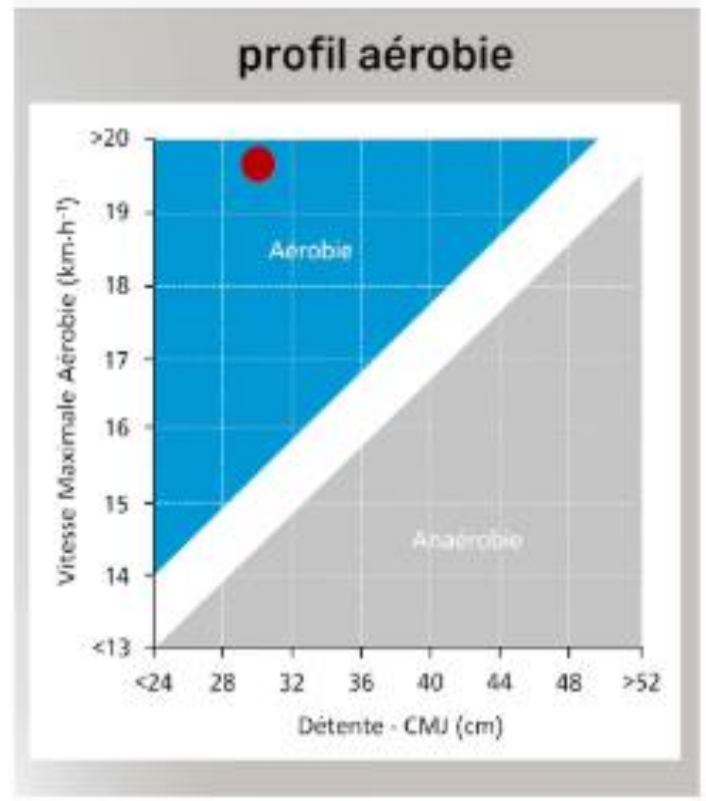


ANAEROBIC MAXIMAL SPEED



VERTICAL TRIGGER

AEROBIC PROFILE





ENERGY PREFERENCES TENNIS PROFILES

	<p><u>SLOW FIBER PLAYER</u> AEROBIC TENDENCY :</p> <ul style="list-style-type: none">• AT FIRST LET STORM OF OPPONENT SHOT COMING• PLAY LONG RALLY TO TIRED HIS OPPONENT

	<p>FAST FIBER PLAYER ANAEROBIC TENDENCY:</p> <ul style="list-style-type: none">• PLAY SHORT RALLY• REDUCE TIME OF PLAY• HE ACCELERATE THE PACE AND GAME
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ENERGY PREFERENCES ADAPTATION

FIBERS ADAPTATION



FAST → SLOW



SLOW → FAST



MIXTED → FAST

WITH A SLOW FIBER TENNIS PLAYER
AS WE CAN'T CHANGE HIS FIBER TYPE

WE NEED FIND OTHER SOLUTIONS
TO MAKE HIM QUICKER

TECHNICAL / FOOTWORK
VISUAL / REACTION SPEED
TACTICAL / PATTERNS OF PLAY

WITH A FAST FIBER PLAYER
WHO STRUGGLE TO FINISH HIS MATCHES SAME LEVEL
NNED TO DEVELOP HIS SPEED-ENDURANCE



ENERGY PREFERENCES ENERGY MANAGEMENT

TIME OF AVERAGE TENNIS RALLY

MENS : 5 SEC

WOMEN : 7 SEC

Clay court + 1 or 2 secs more

TIMMING RECOVERY

2-4 TIME OF RECOVERY Effort

SOME PLAYER ARE IN SPRINT ENERGY

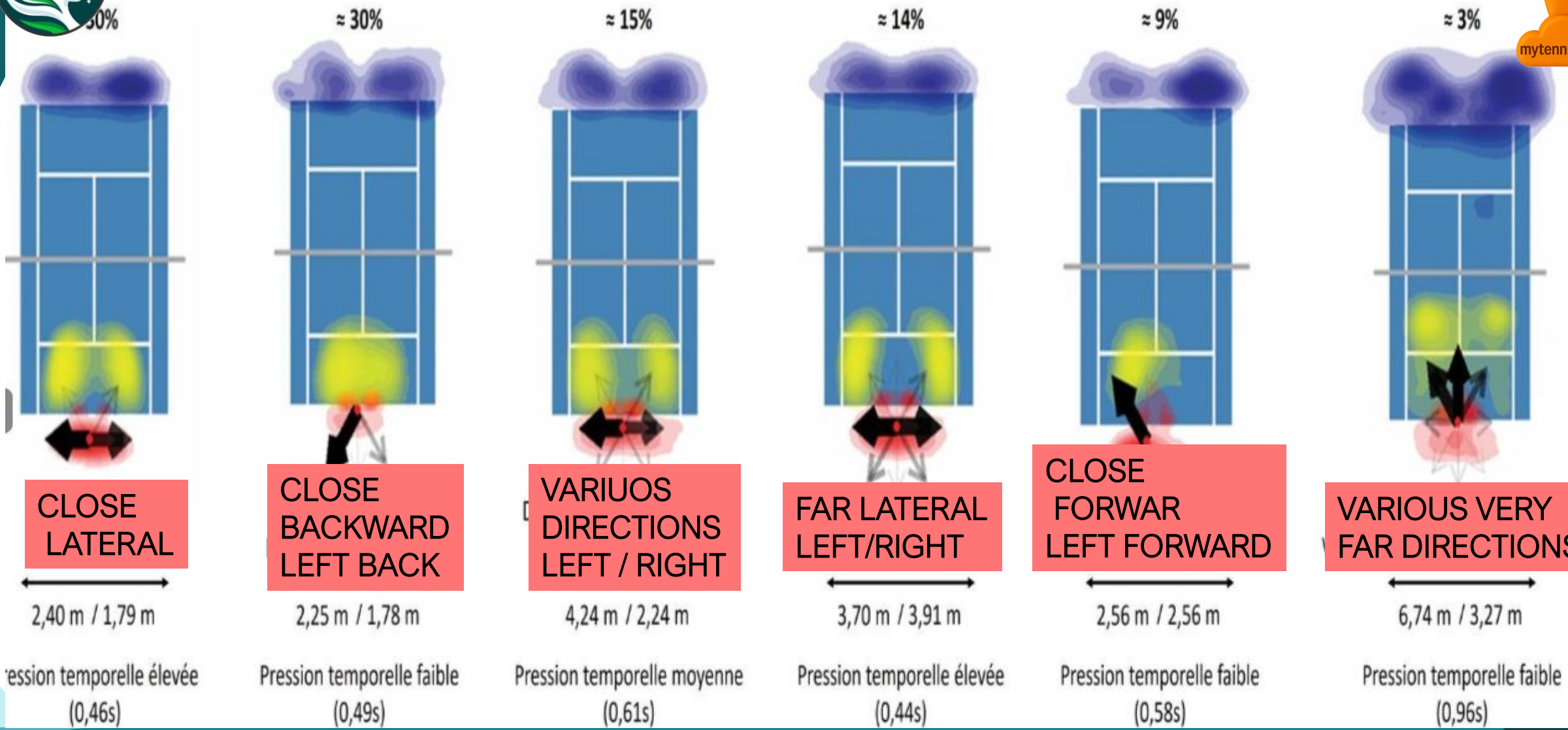
SOME PLAYER ARE IN MIXTE ENERGY

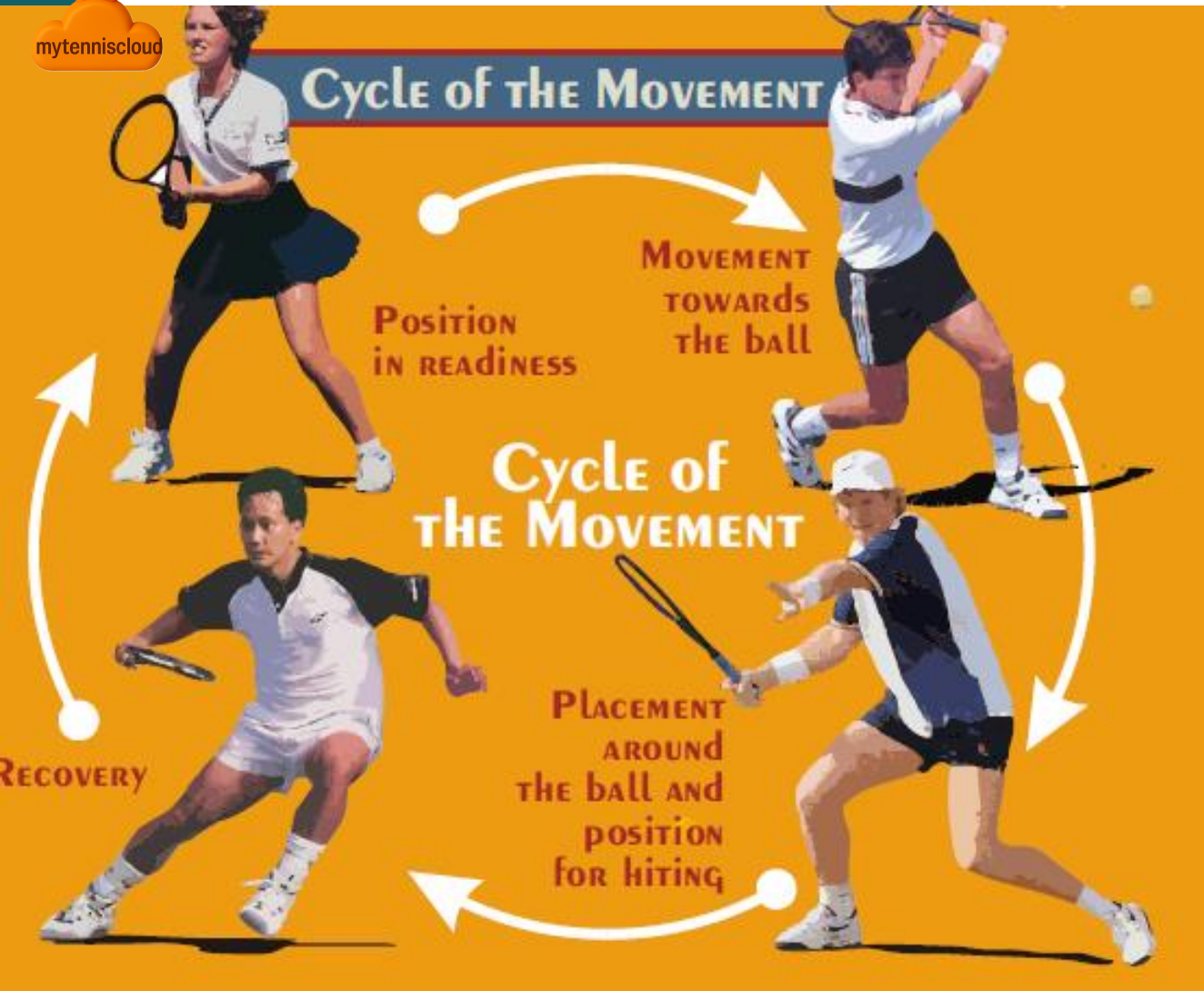
SOME PLAYER ARE MARATHON ENERGY

**TO BE AT THE RIGHT PLACE AT THE RIGHT TIME IN TENNIS
(READING THE GAME/ BOUNCE)**

ITS NOT ENTIERLY DEPENDING ON TYPE OF LEGS MUSCLES

YOU CAN BE A TOP PLAYER WITH SLOW FIBER MSUCLES



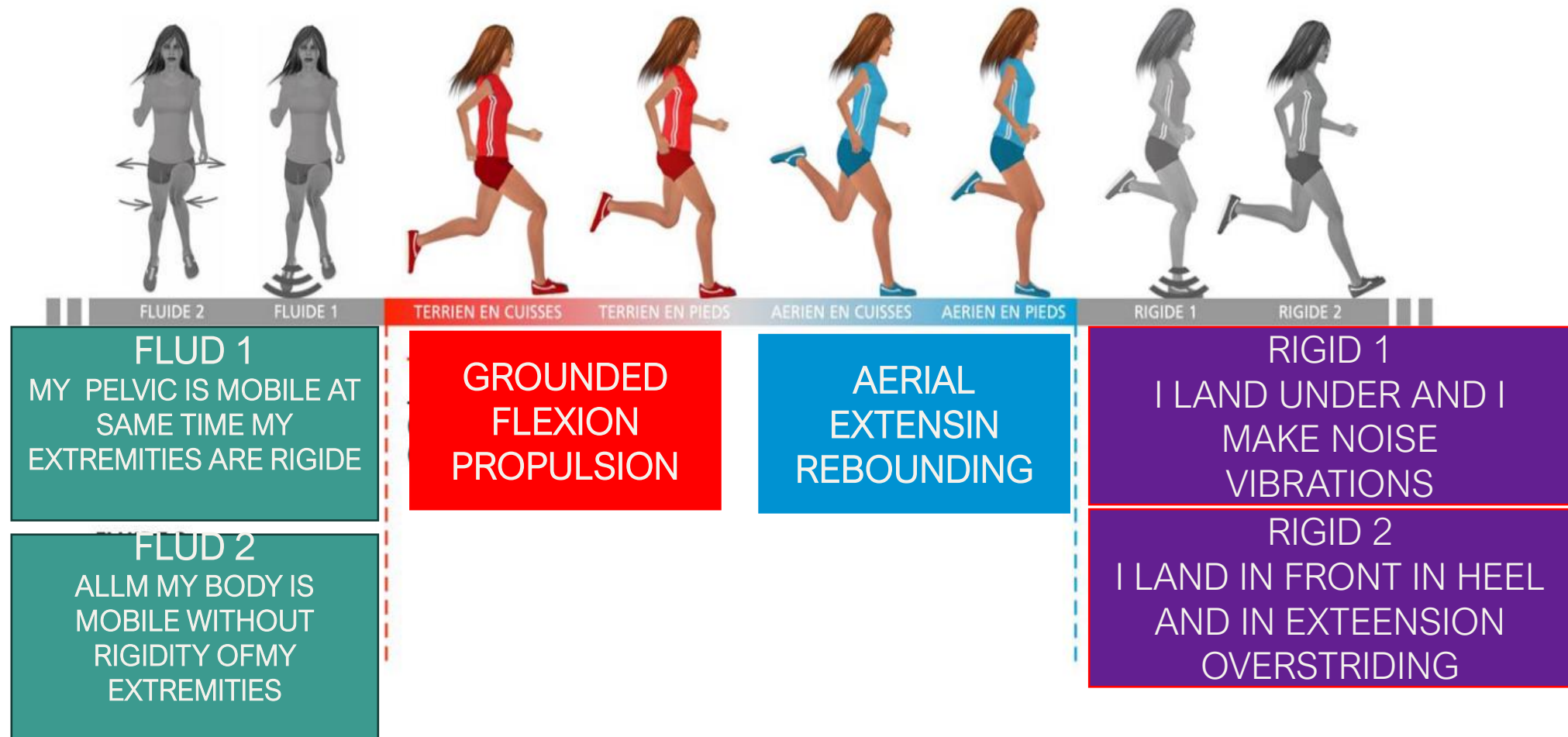


FAST FIBER PLAYER KEEP 3 TO 1 RATIO

- 3 EXERCICES ANAEROBIC
- SPRINT / FAST FEET
- 1 EXERCICE TO IMPROVE SPEED ENDURANCE/ AEROBIC
- WORK RATIO / 10 SEC WORK
- 15 SEC REST



MOTRICITY CURSOR





RUNNING PATTERNS STUDIES

LOW
TIME FLY

LONG
ACTIVATION
HAMSTRING

HEEL
LOADING

HIGH LEGS
COMPRESSION

EARLY
CALF
MUSCLE
ACTIVATION

BALL
FEET
LOADING

CO-CONTRACTION
QUADRICEPS-HAM
STRINGS MUSCLES

HIGH
STIFFNESS

LOW
GROUND
TIMING



1 GROUNDED DISSOCIATE STAFF



STRONG
POINT



WEAK
POINT

- DOCTOR: WEAK ANKLES
- FITNESS COACH: SQUATS WITH BALL ON D8
- LUNGES WITH ROTATION, CONCENTRIC WORK, UNIPODAL SQUAT/ CONCENTRIC WORK
- PHYSIO: QUADRICEPS, PSOAS STRETCHING EXCENTRIC
- OSTEOPATH: MOBIL POINT D8 / FIXED POINT L5
- PODIATRIST: COG BACKWARD, CENTER
- MENTAL COACH. ALWAYS FIXED THE BALL IN MOVEMENT



2 GROUNDED ASSOCIATE STAFF



STRONG
POINT

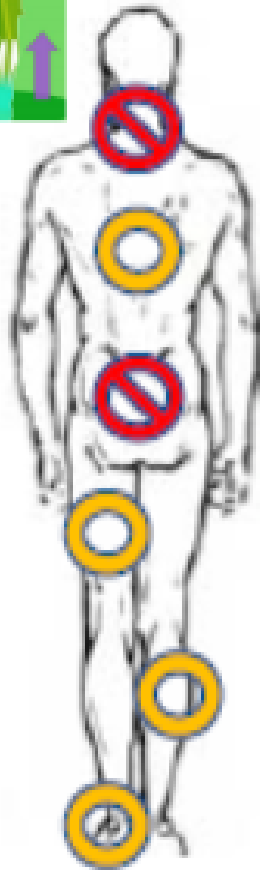
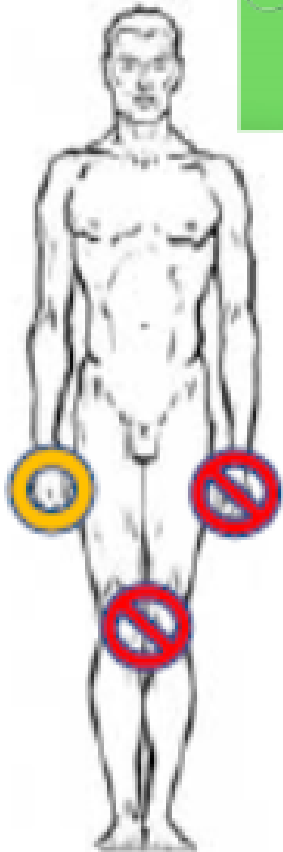
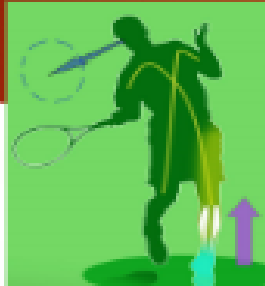


WEAK
POINT

- DOCTOR: ANKLES WEAK
- FITNESS COACH: ON ALL FOUR WITH SWISS BALL ,
CENTRAL CORE , CONCENTRIC WORK
- PHYSIO : STRETCHING EXCENTRIC QUADRICEPS,
ADDUCTORS,PSOAS
- OSTEOPATH: MOBIL POINT L 5 / FIXED D 8
- PODIATRIST : COG BACK , CENTER:
- MENTAL COACH ; FOCUS ON THE BOUNCE AREA



3 AERIAL DISSOCIATE STAFF




STRONG
POINT


WEAK
POINT

DOCTOR: LCAE LEFT KNEE

FITNESS COACH: ACTIVATE POSTERIOR MUSCLE CHAIN GLUTE, CALVES, CORE OLIQUEUE/ PIOMETRIC WORK

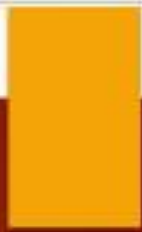
PHYSIO: STRECHTING CALVES EXENTRIC

OSTEOPATH : MOBIL POINT D8 / FIXED L5

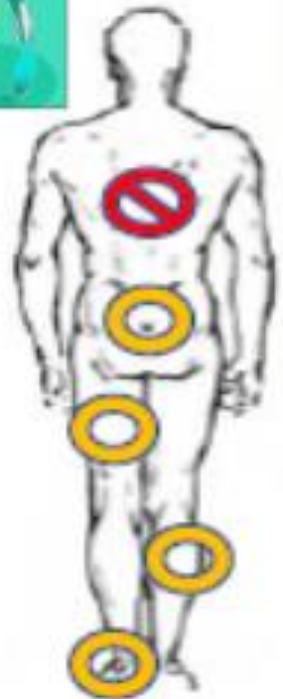
PODIATRIST: LOAD ON LEFT FOOT

MENTAL COACH: FOCUS ON THE BOUNCE





4 AERIAL ASSOCIATE STAFF



STRONG POINT



WEAK POINT

DOCTOR : LCAE RIGHT KNEE

FITNESS COACH : ACTIVATE POSTURAL CHAIN
ISCHIO, GLUTES, CALVES , ANKLES
PLIOMETRIC ASSOCIATED EXOS
CENTRAL CORE MSUCLES

PODIATRIST; LIKE LOAD ON RIGHT FOOT COG FRONT

OSTEOPATH; MOBIL POINT L 5 / FIXED D 8

PHYSIO: GLUTES, CALVES, ANKLES WORK STRETCHING

MENTAL COACH: FIXED THE BALL AT IMPACT



PATHOLOGY / STRESS / FATIGUE

Under stress
fatigue the coordination:
posture, preference are
Effected and change



80%

20%



ARCHAICS REFLEXES

ARCHAIC REFLEX

- ▶ PRIMITIVE MOVEMENT
- ▶ INVOLUNTARY
- ▶ SENSORY STIMULUS

- ▶ GRADUAL INTEGRATION
- ▶ of an involuntary reaction
- ▶ to a voluntary response

ARCHAICS REFLEXES

- Are automatic motor patterns present since birth
- They ensure survival and facilitate the motor and postural development
- Normally they get integrated after during 2 first year of life
- Nonintegrated they can in child and adults can generated balance and coordination trouble
- Chronic muscles tension
- Motor motions patterns ineffective
- Cognitive overload (compensation) Muscular and postural pain in adult age
-





Asymmetric tonic Neck reflex

Le réflexe tonique asymétrique du cou (RTAC)

Le réflexe tonique symétrique du cou (RTSC)

Symmetric Tonic Neck reflex

Réflexes primitifs

Le réflexe tonique labyrinthique (RTL)

Le réflexe de Moro (RM)

Tonic Labyrinthine reflex

Moro reflex



Tonic labyrinthine reflex

RÉFLEXE TONIQUE LABYRINTHIQUE (RTL)

Initial role

Set up muscular tone
In the baby

Nonvoluntary response

- Flexion of anterior muscle chain
- Shoulders rolling forward
- Lost of balance

- Extension of posterior muscle chain in arc
- Lost of balance



RÔLE INITIAL

Mise en place du tonus musculaire
chez le nourrisson

RÉPONSE INVOLONTAIRE

Flexion : hypotonus chaîne antérieure,
enroulement des épaules vers l'avant,
perte de l'équilibre

Extension : hypertonus chaîne postérieure,
extension du corps en arc,
perte de l'équilibre



Asymmetric tonic neck reflex

RÉFLEXE TONIQUE ASYMÉTRIQUE DU COU (RTAC)

Initial role

- Left - right body segments coordination in the baby

Involuntary response

- Arms displacement on homolateral of the rotation



RÔLE INITIAL

Coordination segmentaire droite / gauche
chez le nourrisson

RÉPONSE INVOLONTAIRE

Déplacement des bras
du côté homolatéral à la rotation



Symmetric tonic neck reflex

RÉFLEXE TONIQUE SYMÉTRIQUE DU COU (RTSC)

Initial role

Upper-lower body segments coordination in the baby

Involuntary response

- **Flexion:**
Upper body segments and extension of lower body segments
- **Extension**
Of upper body segments and flexion of lower body segments



RÔLE INITIAL

Coordination segmentaire haut / bas chez le nourrisson

RÉPONSE INVOLONTAIRE

Flexion : Flexion des membres supérieurs et extension des membres inférieurs

Extension : Extension des membres supérieurs et flexion des membres inférieurs



MORO REFLEX

Initial role
Protective
reflex in the
baby

Involuntary
response

- Arm
Abduction
- legs move to
Re-balance

RÉFLEXE DE MORO (MR)



RÔLE INITIAL

Réflexe de protection chez le nourrisson

RÉPONSE INVOLONTAIRE

Abduction des bras,
mouvements des jambes
pour se rattraper



DJOKOVIC ARCHAIC REFLEXE





A MORE FUNCTIONAL APPROACH OF TRAINING



FUNDAMENTAL TENNIS MOVEMENTS



CREATING A MOVEMENT



BREAKING



REVIVAL OF A MOVEMENT
IMPULSION/ PROPULSION WITHOUT INITIAL OPPOSITE MOVEMENT



CHANGING DIRECTION
IMPLUISION/ PROPULSION WITH INITIAL OPPOSITE MOVEMENT



We personalized the tasks
Aerial motricity / come from Top -shoulders – ankles

Grounded motricity : come from bottom- hips – core

We personalized the movements / ball trajectories
Cut angles with his motricity

We personalized the exercises
For aerial
For grounded

We solve technical problems using the motricity





3 FEED BALL AND TARGET / PLAYER SHOTS

Every 3 shots feeding change balls/bounces types

**Spin, speed, height
from**

Behind baseline, on and in the baseline

From center, left ,right side of the court

Change target direction and spaces , long , short

Player hitting patterns

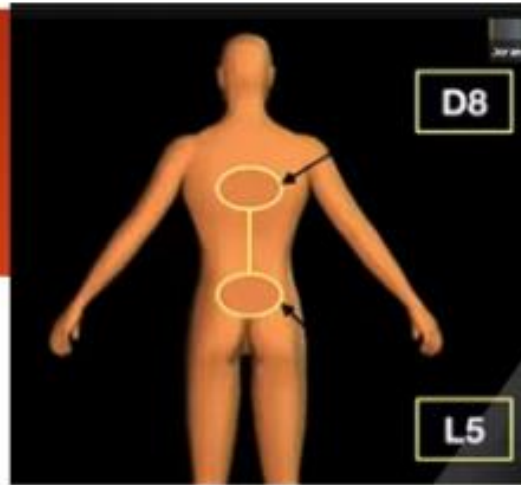
Player hitting shots types



SPECIFCS EXCERCICES DEPENDING MOTOR PREFERENCES

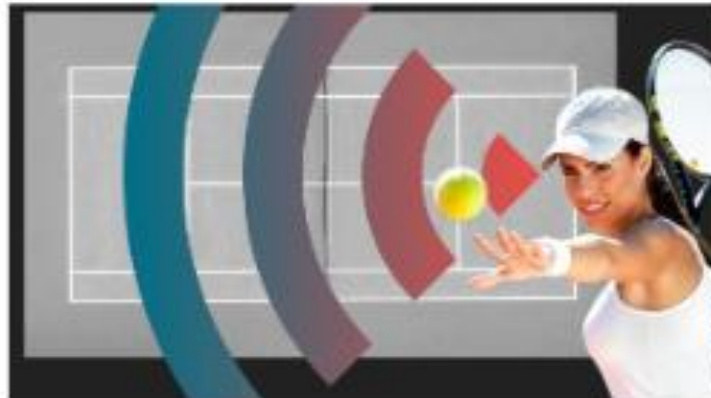
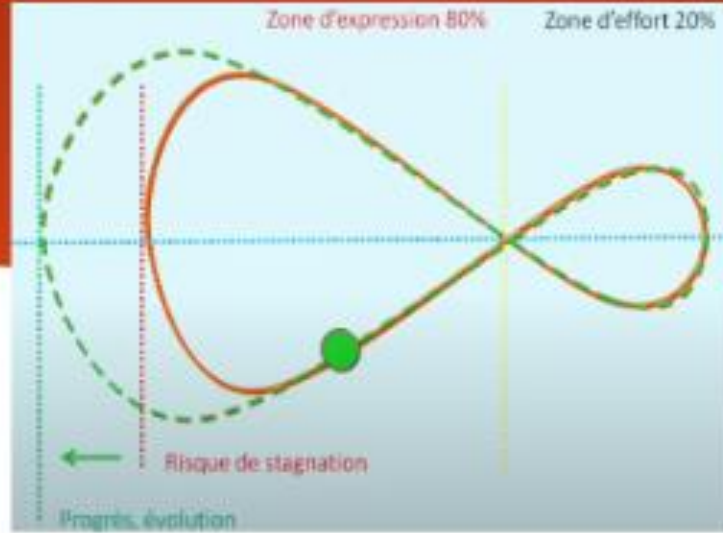


EXERCICES





EXERCICES

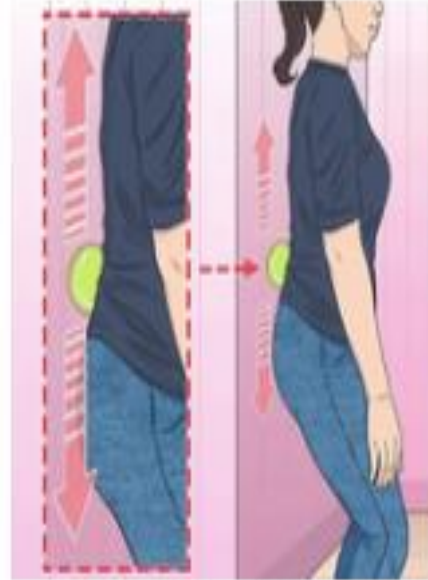




RELAXING THE MOBILE POINT



Option 1



Option 1



Option 2



Option 2

- THE MOBILE POINT IS LIKE A ROUNDABOUT OF COORDINATION AND ENERGY BETWEEN THE LOWER AND UPPER BODY
- KEEPING THE MOBILE POINT VERY SOFT AND MOBILE IS VERY IMPORTANT
- STIMULATING THE MOBILE POINT HELPS ALSO, UNDER STRESS TO COME BACK IN THE BODY AND GET OUT THE MIND CONTROL TO RELAX AND RE-ENERGISE



AIR
TERRE



COURSE RAPIDE



DESCENTE DOUCE



COURSE REBOND
LE KANGOUROU



MARCHE AIR
ACTIVE



COURSE LENTE/TERRE



ROLLING PATTERN



LE SERPENT



LE LEZARD



LE JAGUAR



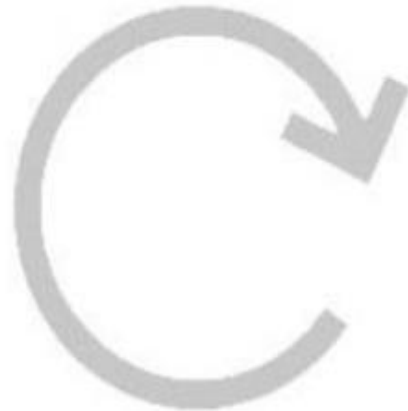
MARCHE ANCRAGE



MARCHE TERRE



MARCHE ENROULEE
MEDITATIVE



3 EXERCICES IN THE
PREFERENCE
(strength))
FOR
1 EXERCICE IN THE SHADOW
AERA
(weakness)



GROUNDDED PLAYERS WARM UP



TERRIEN



- 1 Je m'équilibre devant en flexion.
- 2 Regardez ma hanche en préparation (armé), voyez comme elle est solide et fléchie.
- 3 J'agis devant en poussant.
- 4 Je traverse la balle.
- 5 Je protège l'arrière car je préfère avancer que reculer.

EXERCICES



Mobilité



Ancrage



Gainage en flexion



Propulsion

JOUEURS Je suis Thiem, Raonic, Schwartzman,
TERRIENS Tsonga, Connors pour les anciens.

TERRIEN - PROTOCOLE RUSSE



Je mobilise mon bassin.
 Quand mes articulations bougent, ma fluidité gagne.



Je fléchis autour des hanches.
 Je suis fort dans mon centre.



Je m'ancre dans le sol. Je pousse progressivement, de bas en haut.



J'agrippe le sol devant moi.
 Je le passe derrière moi.
 Je suis solide et puissant à la fois.



TERRIEN CUISSSES
 Mobilité articulaire
 Gainage en flexion



TERRIEN PIEDS
 Exercices dissociation
 Propulsion



AERIAL PLAYERS WARM UP



AÉRIEN



- 1 Je m'équilibre devant en extension.
- 2 Regardez mon corps en préparation, voyez comme il est léger et aligné.
- 3 J'agis en rebondissant.
- 4 Je frappe la balle.
- 5 Je me place devant car je ne rechigne pas à reculer.

EXERCICES



Étirements



Rebonds verticaux



Gainage en extension



Rebonds horizontaux

JOUEURS AÉRIENS

Je suis Federer, Sinner, Dimitrov, Gasquet, Leconte pour les anciens.



Je sollicite mes chaînes postérieures dans leur longueur.



Mes épaules basculent en avant. Mes jambes rattrapent l'équilibre.



Haut et/ou bas de corps, j'augmente la cadence. Je suis dynamique.



Je rebondis, à la verticale, à l'horizontale. Réactif, je suis léger.



AÉRIEN CUISSES

Exercices d'association
Rebonds en cuisses



AÉRIEN PIEDS

Allonge et aligne
Gainage en extension
Rebonds en pieds



PROPRIOCEPTION / CORE TRAINING INDIVIDUALIZATION



AERIAL



GROUNDDED





SQUAT INDIVIDUALIZATION





GROUNDING EXERCISES PROGRAM



MOBILITE MOBILITY

Mon corps est mobile à chaque articulation. Mon bassin dessine des courbes fluides sans variation de vitesse.



CORE STABILITY

GAINAGE TERRIEN

Mon centre est fort, il me protège.



POUSSEES VERTICALES VERTICAL PUSHES

Mes appuis sont larges, mon centre solide. J'ajoute du poids et je pousse sans intention d'accélérer (force). Je passe progressivement à la puissance.



HORIZONTAL PUSHES

POUSSEES HORIZONTALES

Je pose, je passe et je pousse. Le sol recule derrière moi.





AERIAL EXERCISES PROGRAM

MOBILITY

ETIREMENTS AERIEN

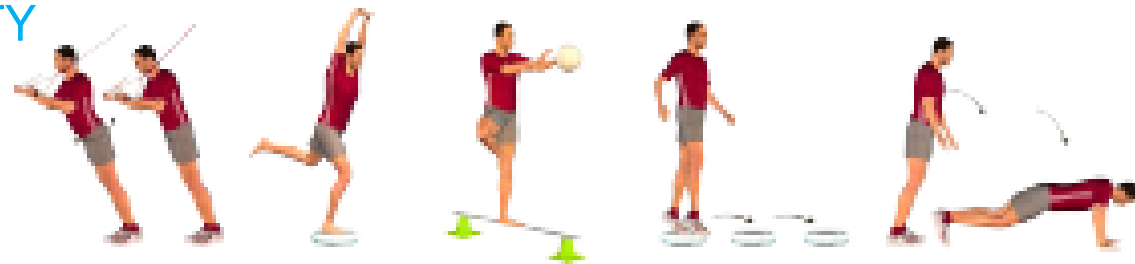
J'allonge les muscles à l'arrière et je bouge au niveau des zones de tension.



BALANCE CORE STABILITY

EQUILIBRE AERIEN

Je maîtrise l'espace avant. Mon corps est tonique, mes bras sont souples et agiles.



VERTICAL JUMPS

REBONDS VERTICAUX

Mes appuis sont réactifs.



HORIZONTAL JUMPS

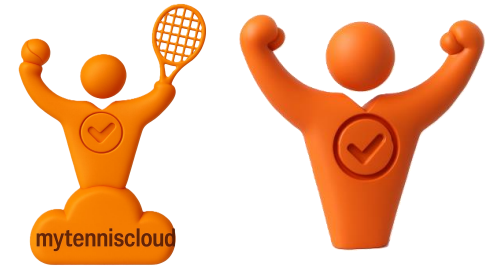
REBONDS HORIZONTAUX

Je rebondis vers l'avant.





GYM WORKOUT COGNITIVES MOTIVATIONS PREFERENCES



CONQUEROR

HIGH NEURO FIRE DRIVEN

LOVE TO LIFT HEAVY / explosive lift

HERO

MUSCLES DRIVEN TYPE

NEED TO FEEL STRONG MIND MUSCLES

CONNEXION FEEL THE RIGHT MUSCLES LOADING

LIKE INTENSITY

NO NEED HEAVY WEIGHT

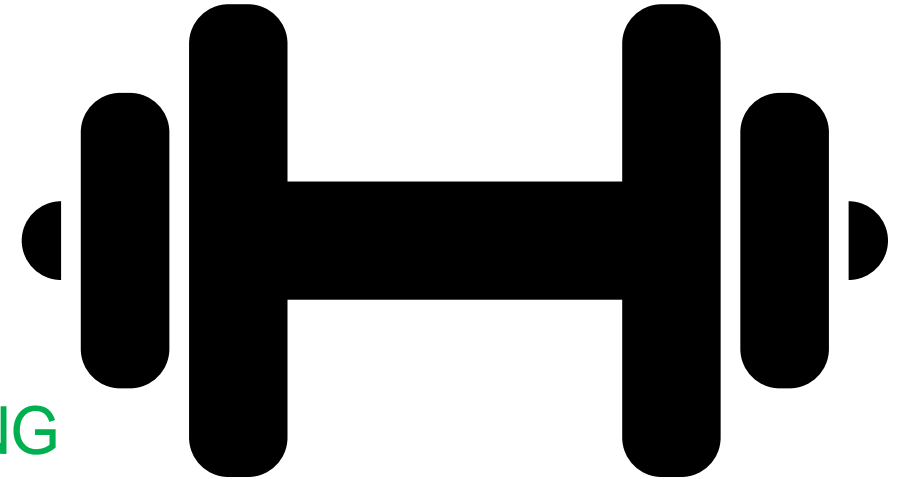
ARCHITECT

STRUCTURE DRIVEN

THE TECHNIQUE AND MOVEMENT PRECISION

MASTER THE TECHNIQUE AND MOVEMENTS PATTERNS

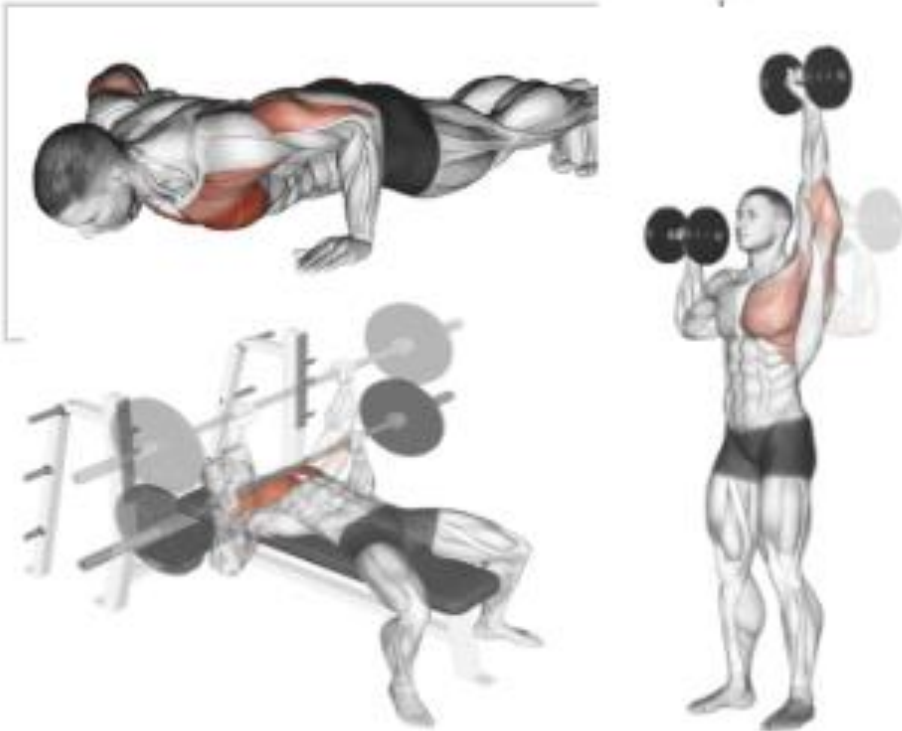
NO NEED HEAVY WEIGHT





GYM WORKOUT 1 PREFERENCES

**GROUND
STRONGER IN PUSHING MOTIONS**



**AERIAL
STRONGER IN PULLING MOTIONS**



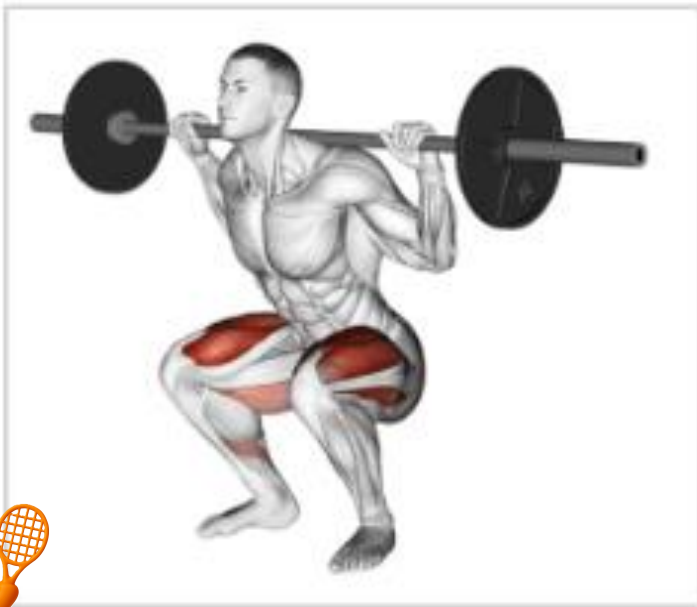


GYM WORKOUT 2 PREFERENCES

ANTERIOR MUSCLE CHAIN

-GROUNDED

GROUNDED

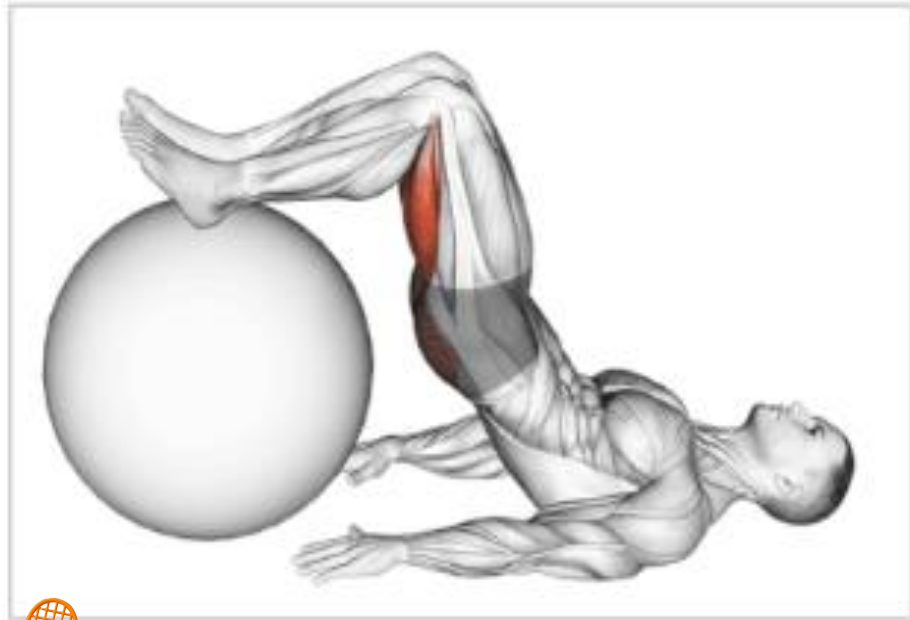




GYM WORKOUT 3 PREFERENCES

POSTERIOR CHAIN

AERIAL

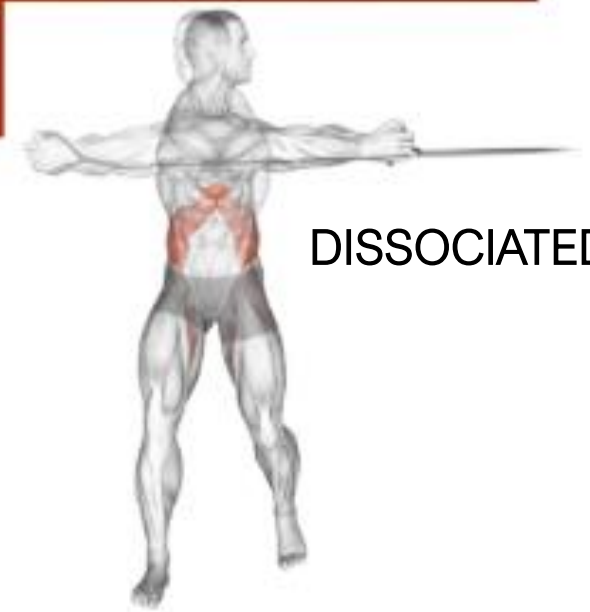


AERIAL





GYM WORKOUT 4 PREFERENCES TRUNK-CORE



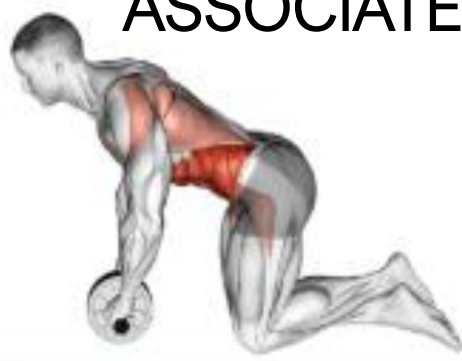
DISSOCIATED



augmenter l'instabilité



ASSOCIATED

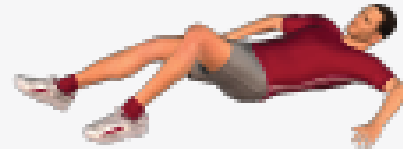




GROUNDING STRETCHING



J'utilise mes articulations comme des poulies. J'ai besoin "de les huiler", bref de favoriser leur mobilité. Je préfère les étirements localisés et les exercices de mobilité.

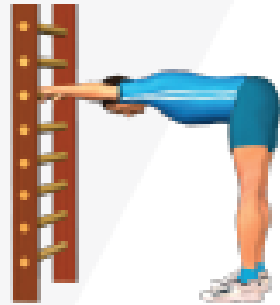


Mon corps est fluide.
Je manque de points fixes.

Mon corps est poulie.
Fort au centre, mobile autour.



AERIAL STRETCHING



Mon corps est ressort.
J'étire la chaîne postérieure
pour garder mon élasticité.
Je favorise aussi les
étirements balistiques.
Chez moi, tout est rebond,
tout est renvoi d'énergie.



Mon corps est ressort.
Je lève les tensions.

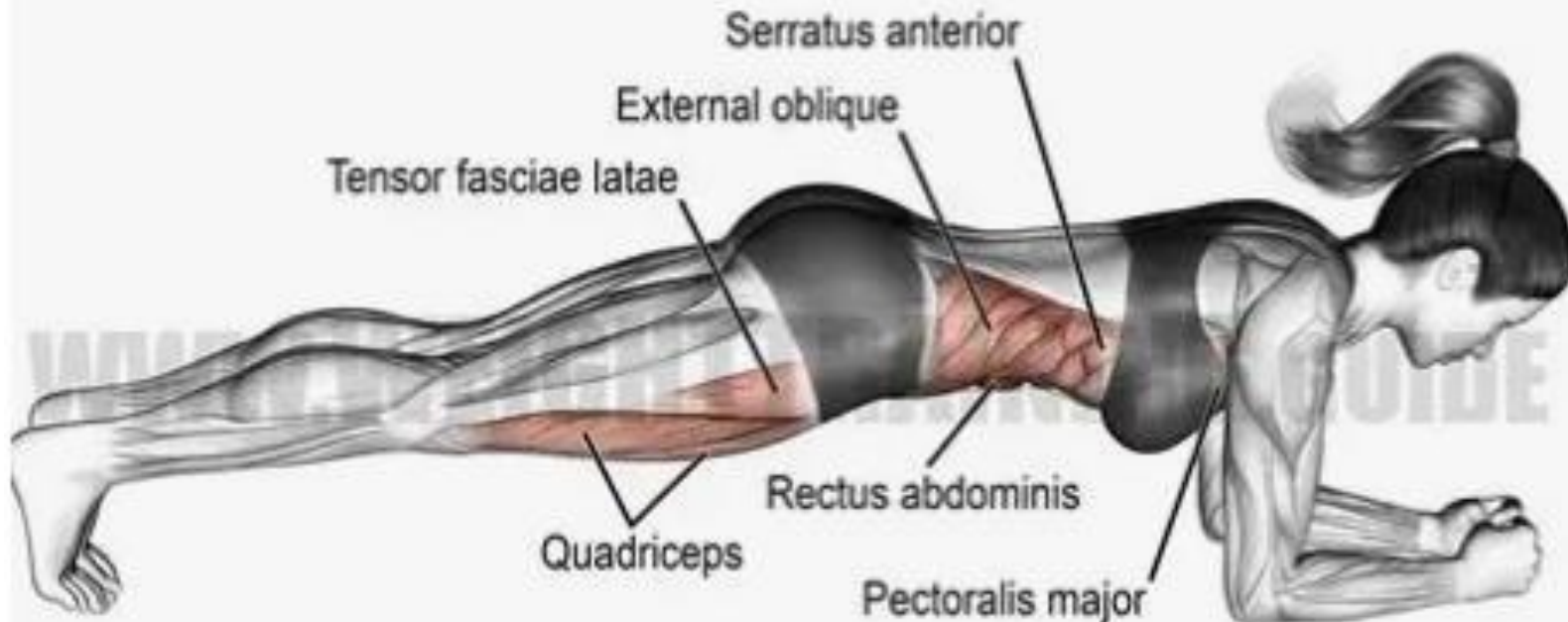
Mon corps est rigide.
Dur, je bouge dans le mou.



PLANK EXERCICES INDIVIDUALISATION

GROUNDING ON THE KNEES

AERIAL ON TOES



STUDY SHOW THAT PLANK
IS BEST PHYSICAL EXERCISE TO
PRODUCE BDNF PROTEIN

(Brain Derived Neurotrophic factor)

This protein is crucial for memory
and mental resilience

World record 10 hours
Plank can be the most effective
and effective exercise to increase
BDNF level



REBOUNDING BENEFITS

- **BOOST OXYGEN IN CELLS**
- **BOOST LYMPHATIC SYSTEM**
- **BOOST BLOOD STREAM**
- **BOOST SQUELETAL SYSTEM**
•(BONES,TENDONS,MUSCLES)
- **BOOST CARDIO-VASCULAR SYSTEM**
- **BOOST DIGESTION SYSTEM**
- **BOOST MORAL**





Choosing Your Sleep Position



❌
Side Sleeping
(Provocative)



✅
Side Sleeping
(Fetal)



❌
Stomach Sleeping
(Prone)



✅
Back Sleeping
(Supine)

THANK YOU AND QUESTION TIME

