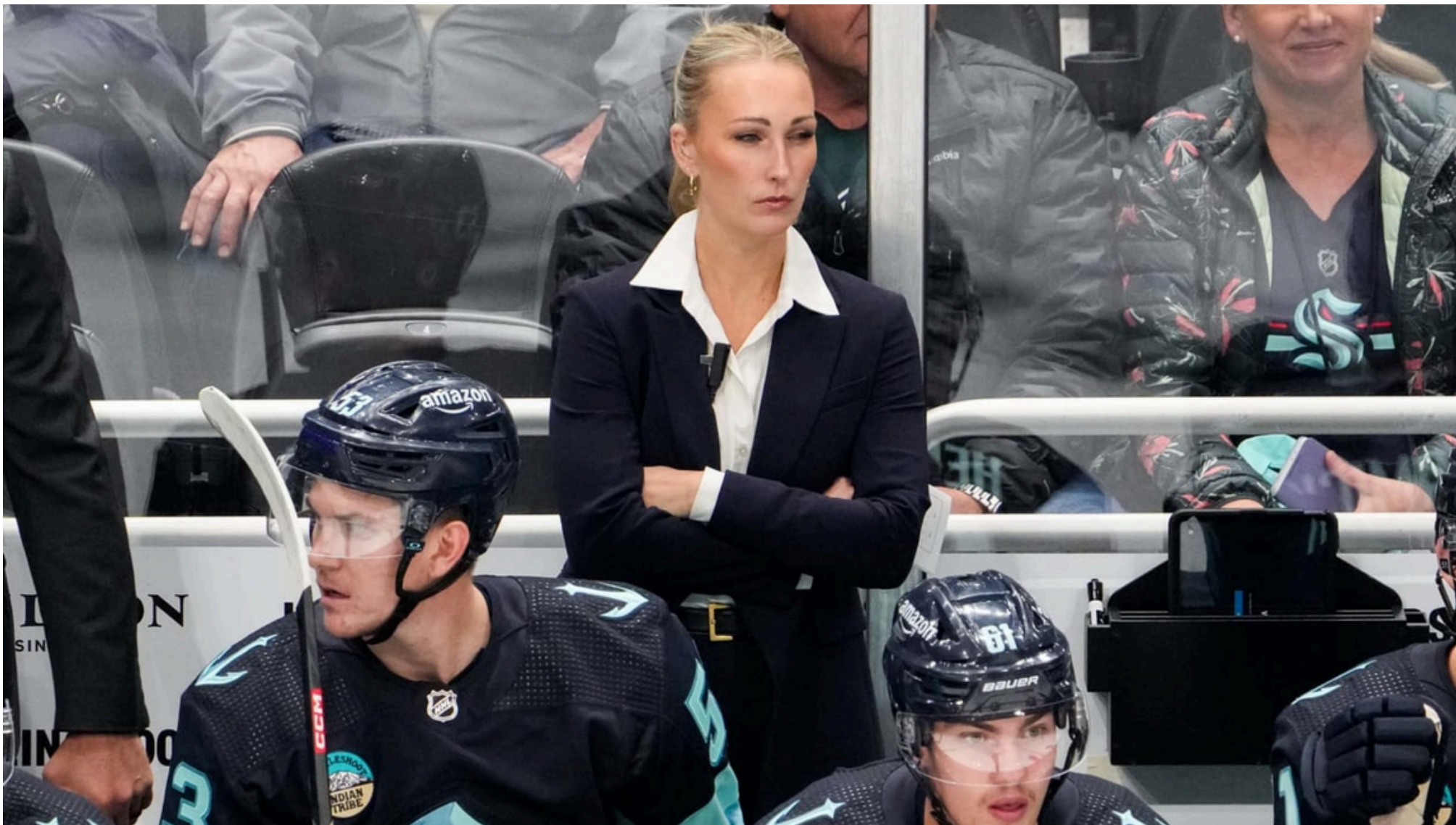


***HOW TO RECOVER  
FASTER THAN  
YOUR OPPONENT***

 martin  
čupka

8th of January 2025, Budapest





A photograph of an ice hockey rink. In the foreground, two players in black and teal jerseys are visible. One player is wearing a black helmet with the number 81 and a clear face shield. In the background, several people, likely coaches, are standing behind a white railing. A woman with blonde hair is looking towards the rink. Another woman is wearing a black jacket with a teal and white logo. The scene is brightly lit, typical of an indoor arena.

***WHAT DOES  
EVERY COACH  
DREAM ABOUT??***

***HOW COULD MY  
TEAM RECOVER AS  
FAST AS POSSIBLE?***



# MGR. MARTIN ČUPKA, PHD.

**PHD. DEGREE IN SPORTS NUTRITION (COMENIUS UNIVERSITY IN BRATISLAVA)**

**11 YEARS OF EXPERIENCE AS A SPORTS NUTRITIONIST**

**10 OLYMPIC ATHLETES, 21 DIFFERENT SPORTS**

**4000+ HOURS OF INDIVIDUAL CONSULTATIONS**



**WWW.MARTINCUPKA.SK M.CUPKA44@GMAIL.COM**



**ŠIMON NEMEC  
(NEW JERSEY DEVILS)**



**JAKUB GRIGAR  
(OLYMPIC MEDALIST  
IN CANOE SLALOM)**



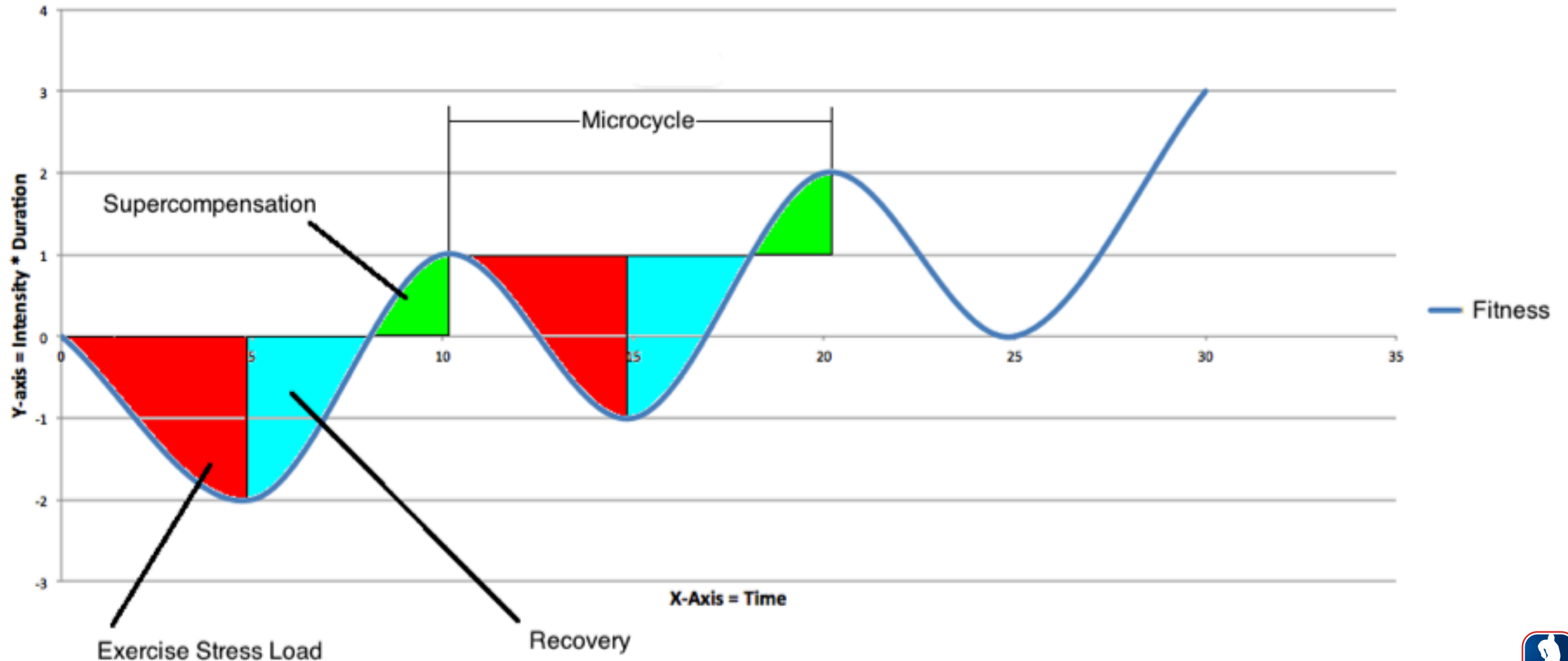
**DOMI ŠKORVÁNKOVÁ  
(CAPTAIN OF SLOVAK  
FOOTBALL TEAM)**



**MARTIN SVRČEK  
(SOUDAL QUICKSTEP -  
WORLD TOUR CYCLING)**

# SUPERCOMPENSATION PRINCIPLE

The Microcycle (Overload Process)





***WHAT COULD HELP MY  
PLAYERS RECOVER AS  
FAST AS POSSIBLE?***





# DIFFERENT WAYS HAVE DIFFERENT EFFECT OR VALUE



**IF I ONLY HAVE LIMITED TIME, WHAT  
IS WORTH PAYING MOST ATTENTION TO?**

**IMAGINE A PILL THAT YOU TAKE EVERY NIGHT. THIS PILL WILL ENSURE THAT YOU WILL BE MORE BEAUTIFUL, STRONGER, SMARTER. THIS PILL IS THE BEST MEDICINE, NUTRITIONAL SUPPLEMENT AND IMMUNE BOOSTER. NOW HOLD ON. IT IS AVAILABLE FOR FREE.**



A close-up photograph of a person's hand holding a small, red and black capsule between their thumb and index finger. The person's face is partially visible in the background, showing their mouth and chin. The background is a plain, light color.

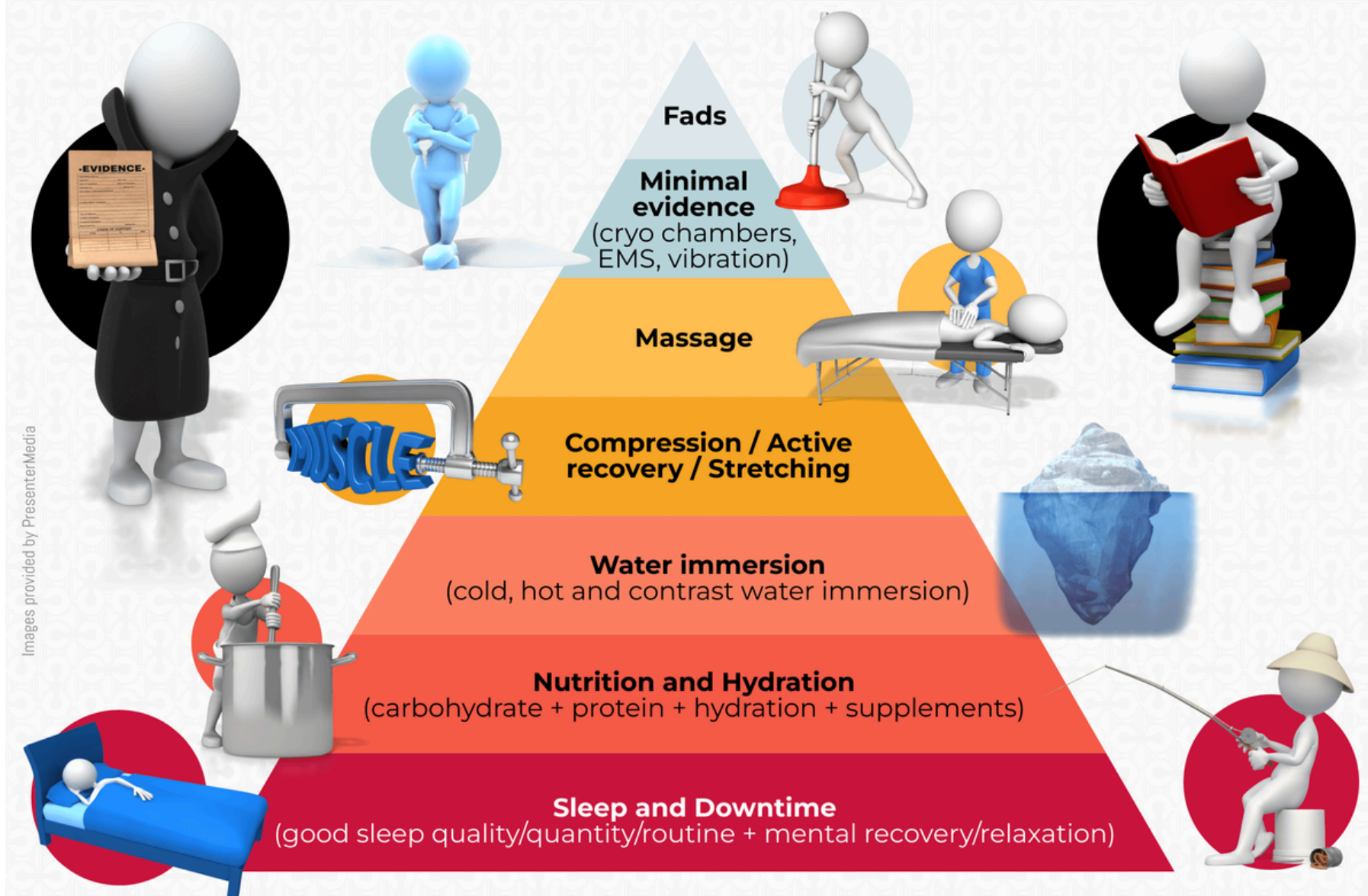
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**SLEEP IS ANYTHING BUT A PASSIVE ACTIVITY. THINK OF SLEEP AS THE MOST PRODUCTIVE THING YOU CAN DO.**

# THE RECOVERY PYRAMID

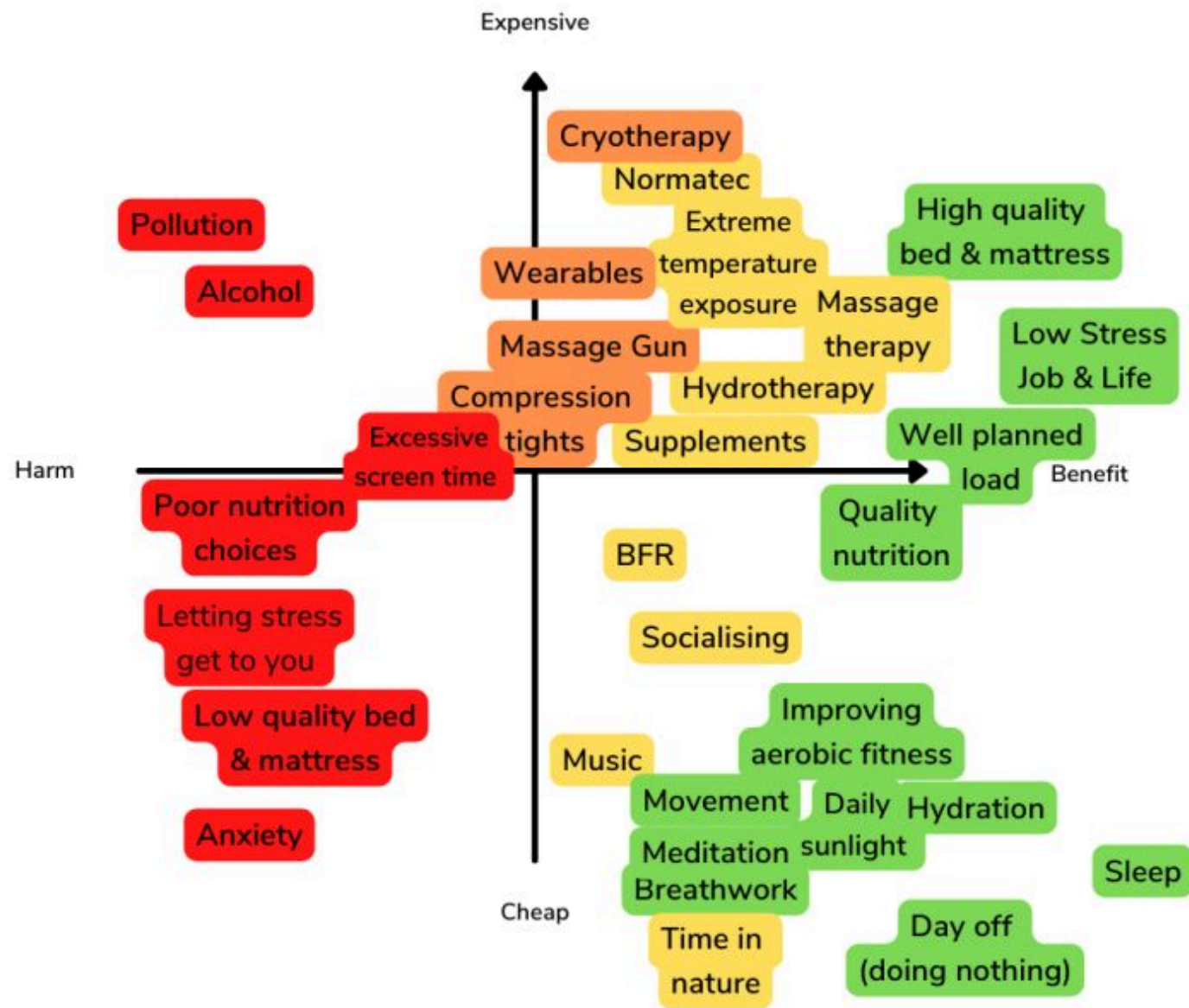
Reference: S. Halson in NSCA's Essentials of Sport Science 2021

Designed by @YLMsSportScience



# Cost-Benefit Recovery Quadrant

@drpetertierney



# WHAT HAPPENS IN THE BODY DURING SLEEP? HOW DOES IT AFFECT PERFORMANCE?



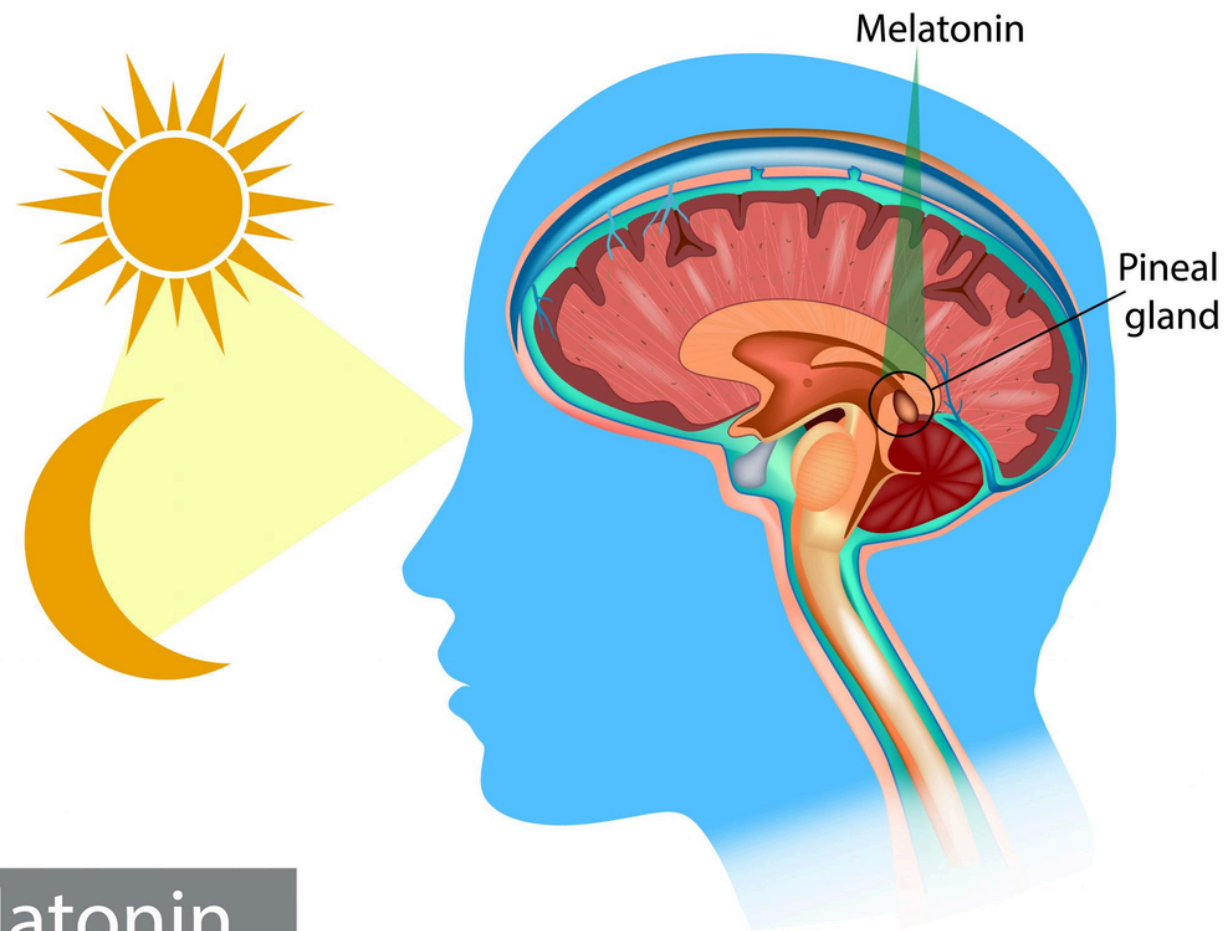
# WHAT ARE THE CHALLENGES OF SLEEP IN ICE HOCKEY OR OTHER SPORT?



# SLEEP AND HORMONES?



# SLEEP AND HORMONES?

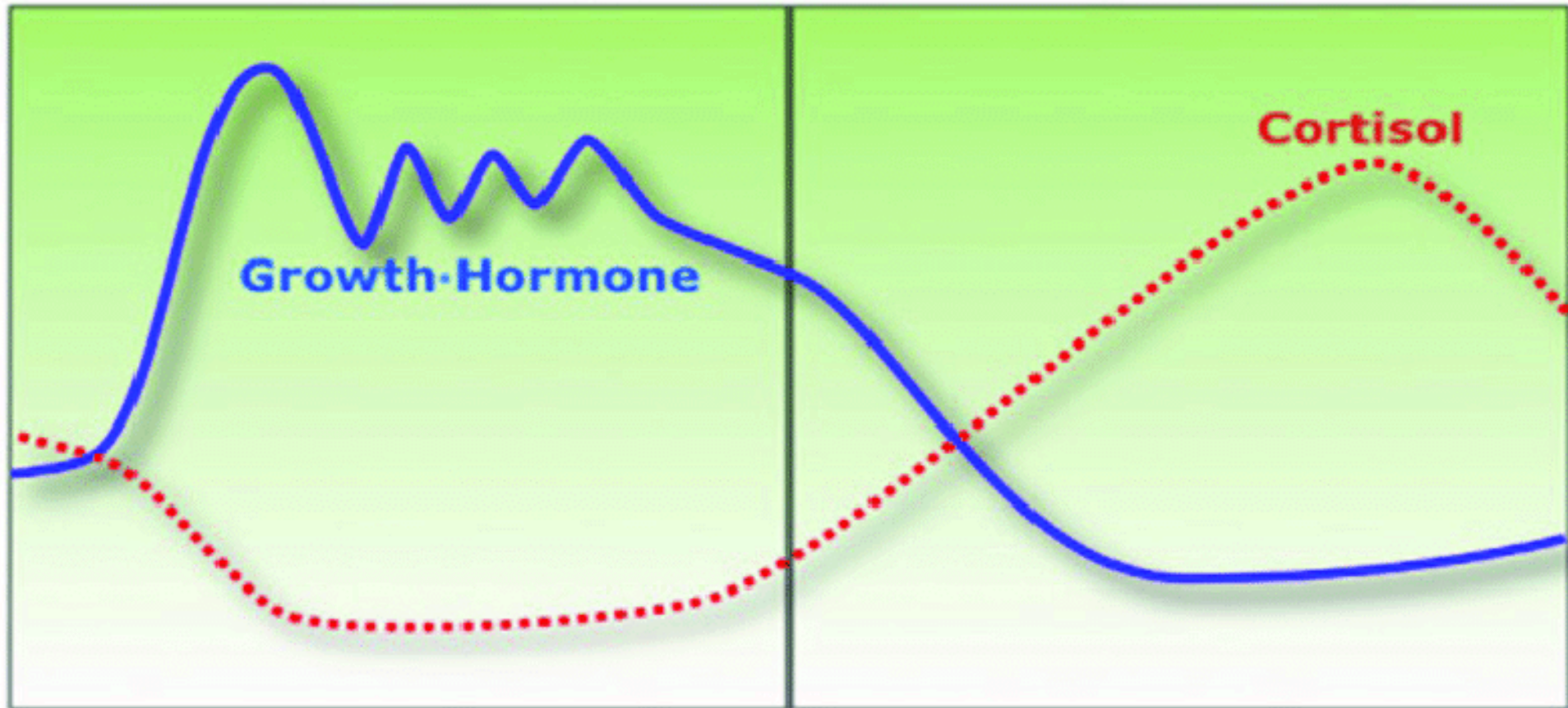


Melatonin

# SLEEP AND HORMONES?

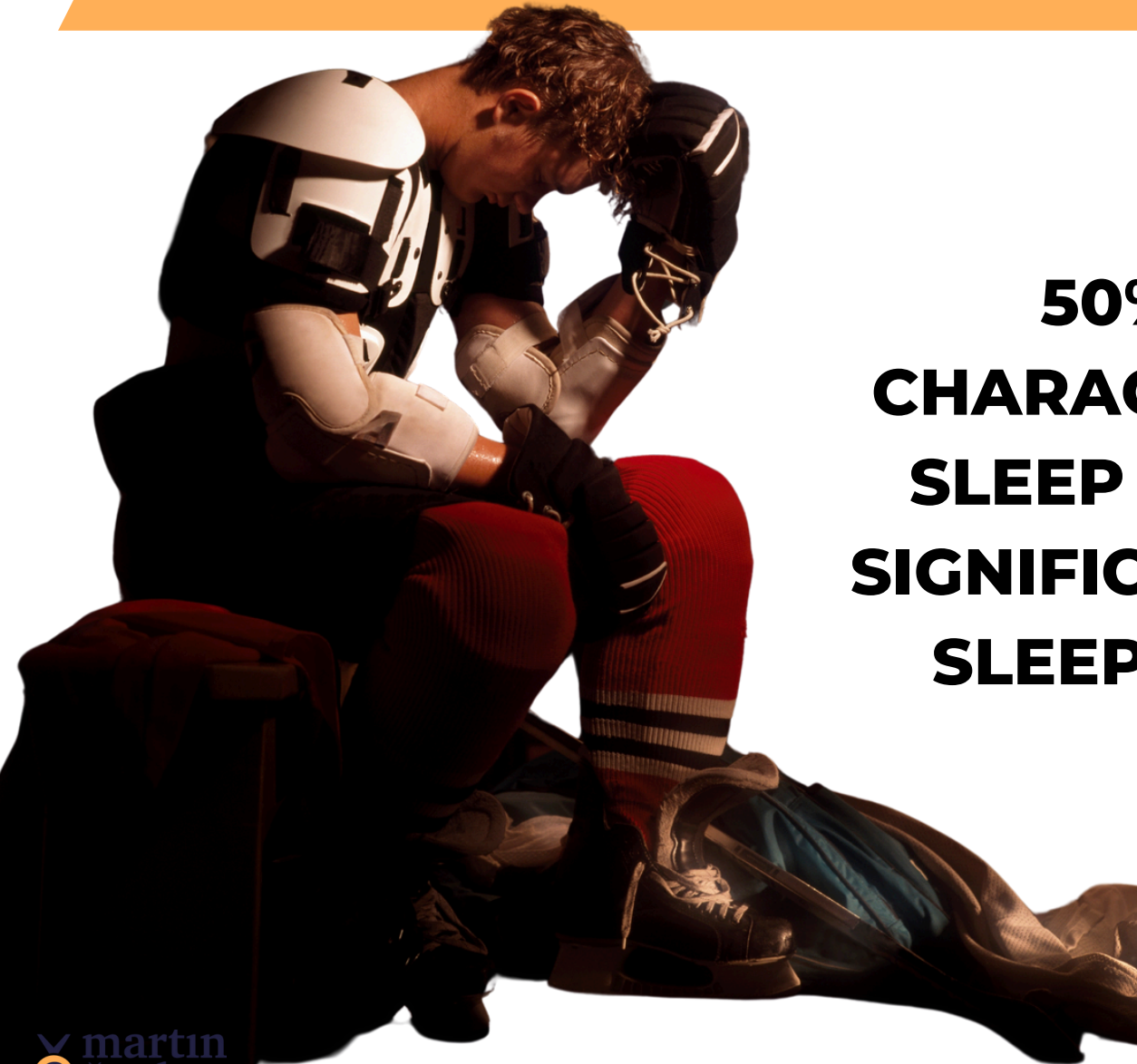
First 1/2 of Sleep

Second 1/2 of Sleep



# SLEEP IS KING - BUT NOT SO SEXY

**50% OF ELITE ATHLETES ARE CHARACTERISED BY HABITUAL SHORT SLEEP (<7 HOURS/NIGHT), 28% WITH SIGNIFICANT PREVALENCE OF DAYTIME SLEEPINESS AND 38% OF SNORERS**



# MEASURING OF SLEEP?



# MEASURING OF SLEEP?



**RELIABLE FOR MEASURING TOTAL SLEEP TIME. OTHER DATA SHOULD BE INTERPRETED WITH CAUTION. SOME ATHLETES ARE PREOCCUPIED WITH SLEEP MONITOR DATA MAY INCREASE ANXIETY AROUND SLEEP AND RESULT IN WORSE SLEEP.**

**ENOUGH SLEEP  
(8+HRS) CAN:**

**LACK OF SLEEP  
(<8HRS) CAN:**



**ENOUGH SLEEP  
(8+HRS) CAN:**

**LACK OF SLEEP  
(<8HRS) CAN:**

**IMPROVE PASS ACCURACY  
IMPROVE SPRINT SPEED  
IMPROVE SHOOTING ACCURACY  
IMPROVE DECISION MAKING  
IMPROVE MOOD AND MOTIVATION**



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**IMPROVE PASS ACCURACY  
IMPROVE SPRINT SPEED  
IMPROVE SHOOTING ACCURACY  
IMPROVE DECISION MAKING  
IMPROVE MOOD AND MOTIVATION**

# **LACK OF SLEEP (<8HRS) CAN:**

**LOWER THE IMMUNE SYSTEM  
REDUCE THE PRODUCTION OF GROWTH HORMONE  
REDUCE THE RECOVERY OF MUSCLE GLYCOGEN  
INCREASE THE RISK OF INJURY AND ILLNESS  
INCREASE PERCEIVED EXERTION**





# CAN YOU SLEEP TOO MUCH?



# CAN YOU SLEEP TOO MUCH?



**INCREASED FREE THROW ACCURACY**  
**FASTER SPRINT TIME**  
**LOWER RATE OF PERCEIVED EXERTION**  
**DECREASED FATIGUE**



**FASTER 15M SPEED**  
**FASTER REACTION TIME**  
**FASTER TURN TIME**  
**BETTER MOOD**

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# 3 BIGGEST ENEMIES OF SLEEP

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## **ALCOHOL.**

**INCREASES SLEEP  
PRESSURE, DISRUPTS  
REM SLEEP, SLOWS  
DOWN RECOVERY**

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**CAFFEINE.** HALF-LIFE OF  
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WHEN COMBINED WITH  
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**MORE (BLUE) LIGHT = LESS  
MELATONIN = WORSE SLEEP =  
WORSE RECOVERY.**  
USE BLUE LIGHT FILTER OR BLUE  
LIGHT BLOCKING GLASSES.

# PRE SLEEP FOOD?



**EATING PROTEIN BEFORE BED CAN IMPROVE THE QUALITY AND QUANTITY OF SLEEP. THIS MEANS 20 TO 40 GRAMS OF PROTEIN RICH IN TRYPTOPHAN (SUCH AS WHEY PROTEIN OR MILK) WITHIN 1-2 HOURS BEFORE BEDTIME.**



**FOODS CONTAINING A HIGH CONCENTRATION OF MELATONIN (CHERRIES, PISTACHIOS) CAN SHORTEN SLEEP ONSET TIME.**



# 7X KEY TAKEAWAYS

- 1) REGULAR WAKE-UP AND BEDTIME (EVEN DURING THE WEEKEND)**
- 2) NATURAL LIGHT EXPOSURE AFTER WAKING UP**
- 3) NAPPING (<30 MIN) OR SLEEP BANK (MORE SLEEP AHEAD OF TIME)**

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- 2) NATURAL LIGHT EXPOSURE AFTER WAKING UP**
- 3) NAPPING (<30 MIN) OR SLEEP BANK (MORE SLEEP AHEAD OF TIME)**
- 4) NO BLUE LIGHT 1-2 HOURS BEFORE BED (BLUE LIGHT FILTERS)**
- 5) PRE-SLEEP RITUALS FOR “CLEAR MIND” (READING / JOURNALING / BATH / CHAMOMILE TEA)**
- 6) FOOD (TART CHERRIES, PROTEIN ESP. TRYPTOPHAN)**
- 7) DARK AND COLD ROOM - 20 'C = (FRESH AIR / THERMOMETER)**

# 7 STEPS YOU CAN DO RIGHT NOW?

- 1) EDUCATE THE PLAYER ABOUT SLEEP MANAGEMENT**
- 2) LOOK FOR REASONS RELEVANT FOR THAT PLAYER**
- 3) SELF-ASSESSMENT OF SLEEP (1-10 SCALE)**



# 7 STEPS YOU CAN DO RIGHT NOW?

**1) EDUCATE THE PLAYER ABOUT SLEEP MANAGEMENT**

**2) LOOK FOR REASONS RELEVANT FOR THAT PLAYER**

**3) SELF-ASSESSMENT OF SLEEP (1-10 SCALE)**

**4) WHAT WOULD HAVE TO HAPPEN FOR MORE POINTS?**

**5) OFFER OPTIONS (SPECIFIC HABITS)**

**6) LET THE PLAYER CHOOSE ONE THING**

**7) AGREE ON HOW YOU'LL KNOW IT'S DONE**

**....REFLECT AND REPEAT**



**QUESTIONS OR COLLABORATION?**



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