n n
learning u athotor skills n g sports

Motor learning and motor skill of Esport Athlete

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learning ÿ The ability to make this There has been a change in quantity.

The knowledge and quality of behavior to enable the experience of memory is the ability to sustain the above changes over time.

kind of learning

speaking Learning from n save n time that stimulated at close

ÿ Learning this

memorizing the properties of stimuli, namely learning from recognizing. The properties of the stimulus, when performed, may produce responses of very high ÿ volume or quality. n B progressively or progressively less

type of memory

Memory is necessary in game Khor Information is used to modify responses in the form of learning. The information

Response According to Figure 1 (a, b), it is seen at the time of request stored in the system . original and then forwarded , will result in

Ke that memory, sensation , short-term memory, the quantity and quality of When converted into long-term memory, which is

which is working in the short term

collect permanent

necessity There are long-term (possibly years-long) effects where we know kind of

This is

my memory because I Patients with injury in some parts of the brain that cause long-term memory is impaired and some patients

A Group that distortion damage in some parts of the brain process with short-term memory become long-term memory

has lost

Theory 3 b a[this] a while collecting memory

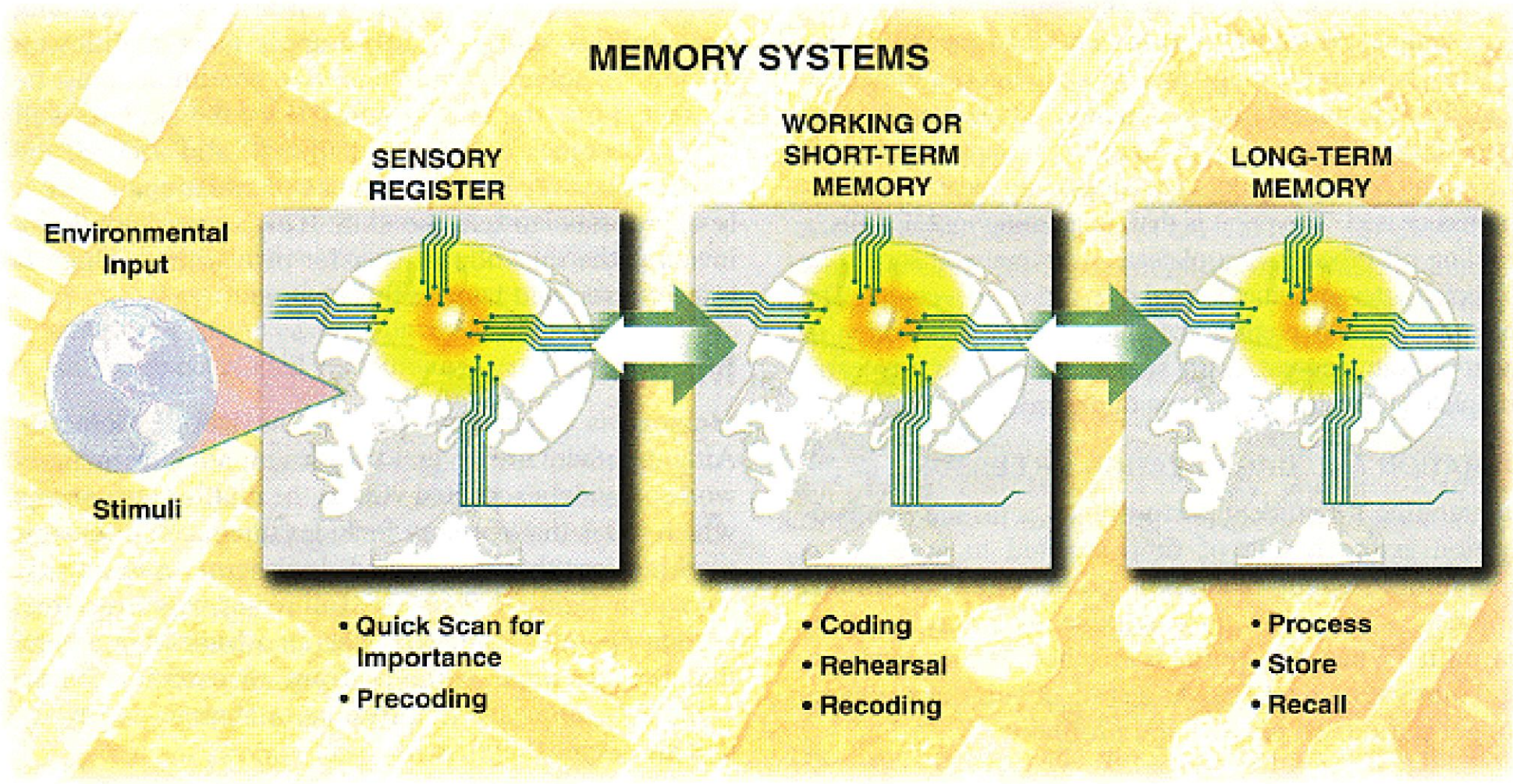
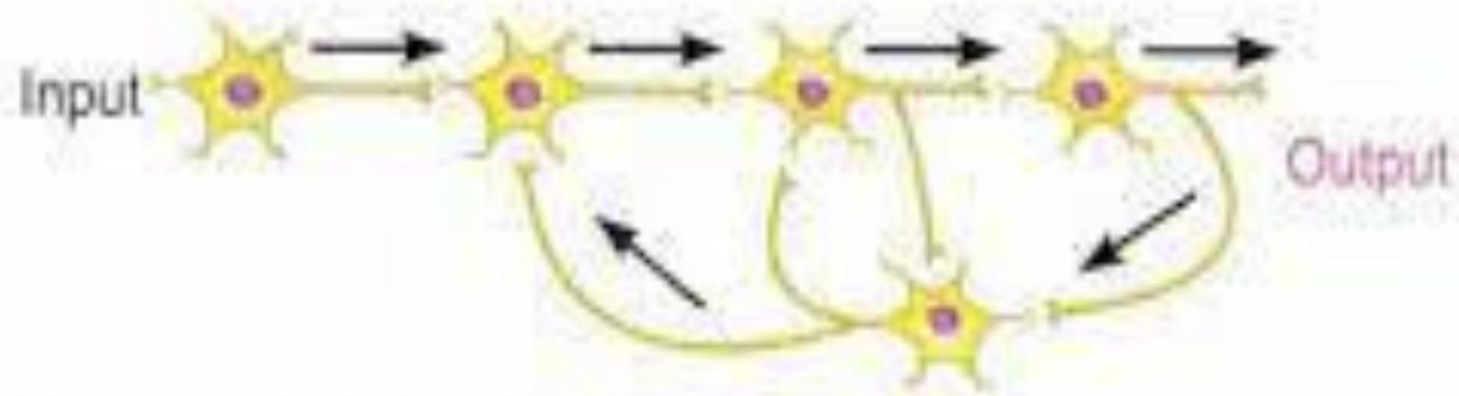


Figure 1-9. Information processing within the sensory register, working or short-term memory, and long-term memory includes complex coding, sorting, storing, and recall functions.

Some theories explain that some types of short-term memory are caused by



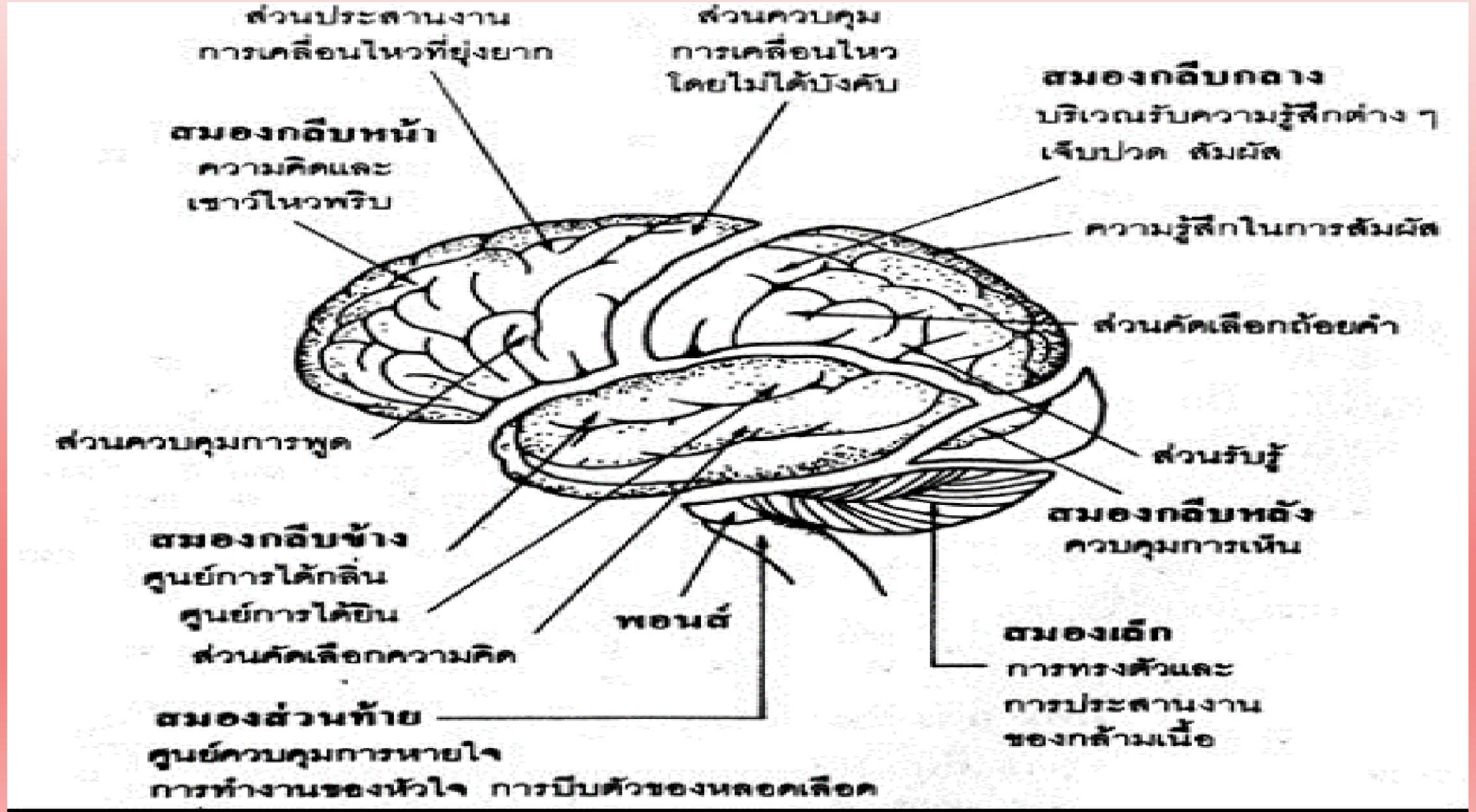
(e) Reverberating circuit

Some texts divide memory into two types.

- ÿ Memory of the truth
- ÿ memory about motor skills

n n n a n

Use different parts of the brain to collect different types of memory.



from the study? The study of Naguadiyasart (monkeys have similar brains) measuring the memory capacity of things related to visual human memory) and some find that various brain damages impair the ability to The monkey's memory is reduced, e.g.

A group in 1987 experimented with destroying parts of the brain of monkeys

lost

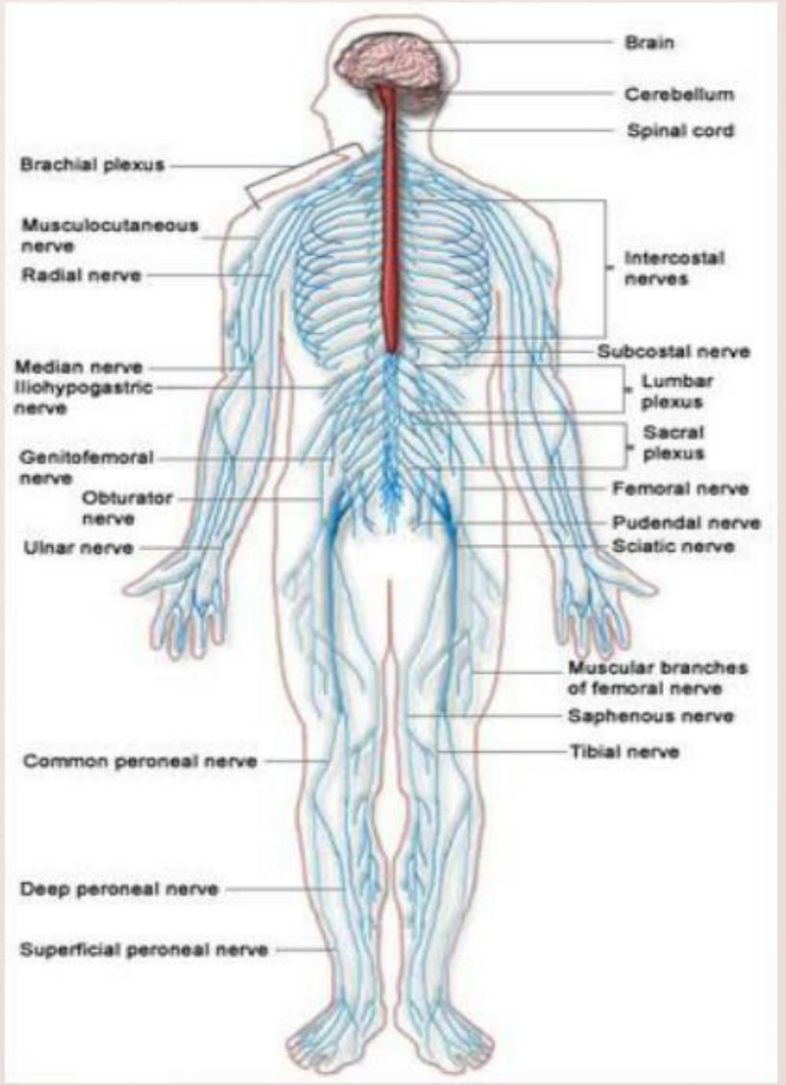
ÿ Basal forebrain

ÿ Prefrontal cortex

ÿ Thalamus and mamillary body ÿ Amygdala and hippocampus

การควบคุมของระบบประสาท

- ระบบประสาท:มีหน้าที่ในการออกคำสั่งการทำงานของกล้ามเนื้อ ควบคุมการทำงานของอวัยวะต่างๆ ในร่ายกาย
- โดยมีเส้นประสาทนำเข้าจะนำความรู้สึกจากอวัยวะต่างๆ เช่น ผิวหนัง ไปยังระบบประสาทส่วนกลาง
- ในขณะที่เส้นประสาทนำออก จะนำสัญญาณกระตุ้นจากระบบประสาทกลางไปยังกล้ามเนื้อและต่อมต่างๆ



this this

Controlling the operation of the glass The various organs need to get sentimental information from the part.

this this this

The moving body, such as the sensation of movement, from Tawakla Mane Tendons, fascias, joints give sensations of consciousness, e.g. reflexes

is reported to the brain or sent to control the movement system. unnecessarily moving in basalganque. Claim control

? this this

balancing yong yang gla Mane and sent to the control center

a this

Leia, Cerebellum The brain that deals with planning movements The multiplicity of the brain request movement skills chapter

that deals with movement control. Wai like Pri Motor Area Supply motor , cerebellar area, and other regions of the brain, as mentioned above.

skills can be trained to become extremely fluent, perhaps a program, which can store many patterns of coordinated movement, some information to control movements Demonstrate good skills and

Rapidly, by stimulating appropriate sensory signals in the sensory brain, some may preclude the movement of the muscles into memory. Fast and accurate, we can start the Motor Cortex and so on

than sensory engrams by sending them signals

engrambanggae Movement skills or side can

Controlling check and accurate, which may not be able to receive emotional information

movements, making fast movements while typing.

ÿ n n a n n

R.D. go to Including learning u Movement skills

ÿ Automatic Movement

ÿ Movements that must be learned.

yes n Science go to school a Skills to control movement ÿ n u move

ÿ Movement according to start-finish and continuation method

ÿ Open or closed skills

n a n this this

Type 1 Residential and office building

u

ÿ series of movements

ÿ Continuous motion ÿ

Continuous series motion

n

Type 2 skills open and close

Confidence

ÿ Open Skills

ÿ Close skill

How to quantify the amount of movement behavior

ÿ Measured to move this How did you achieve your goal?

occur in detail . n Measure the movements that this

ÿ Measurement of electrical changes in the brain between movement

a ÿ n ÿ n n n Technical skills Sensitive by method A About

From the theory of Learn to know that movement is changing. Behavioral changes often have mechanisms fascinated by the system sensory changes, many things are invisible. If I have practiced Mother Increased saturation point in terms of manifesting what is measured probably in many changes, such as the ability to concentrate on the task performed, even when disturbed by Distractions (still working on the accuracy of good) use not much effort Can master that skill, m speed in making happened the work that has been practiced so much that the skill has been acquired from The ability to perform work skills close to c very skeptical of each other student learning, motor skills, and many parallel changes occurring which m trapping can Dangan demonstrates how change can be made.

Sor Experimenting with various factors affecting the study movement of birds sports factors

(amount of practice) ÿ the result of repeating

ÿ Motivation

ÿ Detailed lecture, practice this Yaka speaks (verbal instruction) to the trainee first.

ÿ modeling ÿ massed practice (distributed

practice) ÿ training results some psychology to training

ÿ Atta, do not switch off from time to time.

ÿ Full practice of working patterns or gesturesof skills

sports

ÿ Compared with the results of skill separation training Lakh

ÿ Specificity of training details

The knowledge gained may be useful. can be applied in teaching

Sor results of things various things training t

ÿ Number of training sessions

? study the effect of factors this kg training n D

training ÿ Giving this Determination before

ÿ Before practicing, try to explain ? the importance of work

ÿ Monitoring this aim

ÿ Brief teaching before practice

ÿ Explaining details in advance

ÿ Making it look like

of a good watch with a Gag a good example

ÿ Practicing a lot of time at a time ÿ

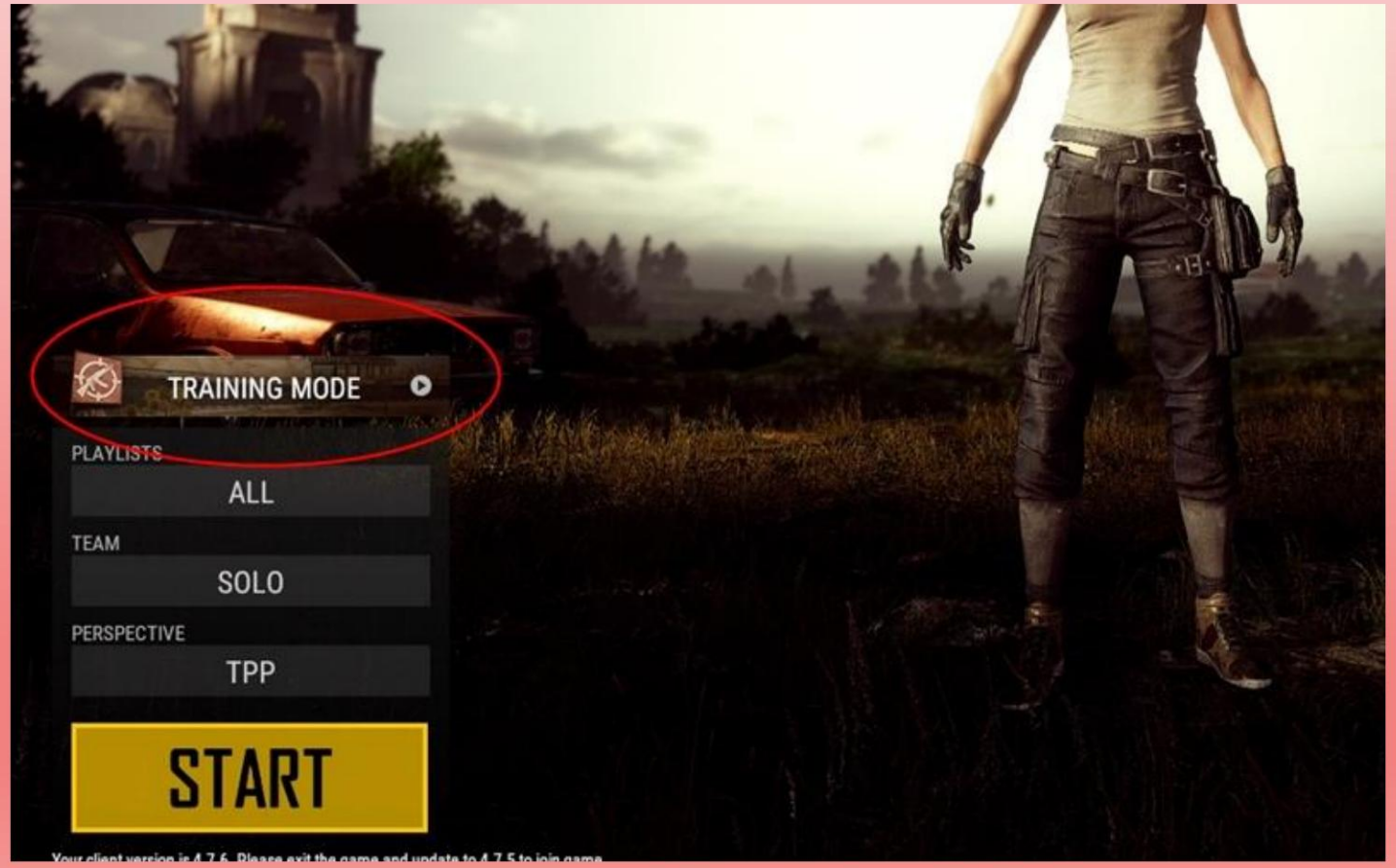
Some tasks give continuous skill training.

ÿ The specificity of the training

ÿ Viewing feedback

n

training mode D



n

training mode D

arcade

Practical
13.00 – 16.00

future board size 60x60 cm ÿ plan	1 plan
ÿ colored tape	1 roll
ÿ pong balls	2 balls
ÿ Tennis ball	1 ball
ÿ Games	Pub g
ÿ Stopwatch	

Fundamentals of training esports athlete training

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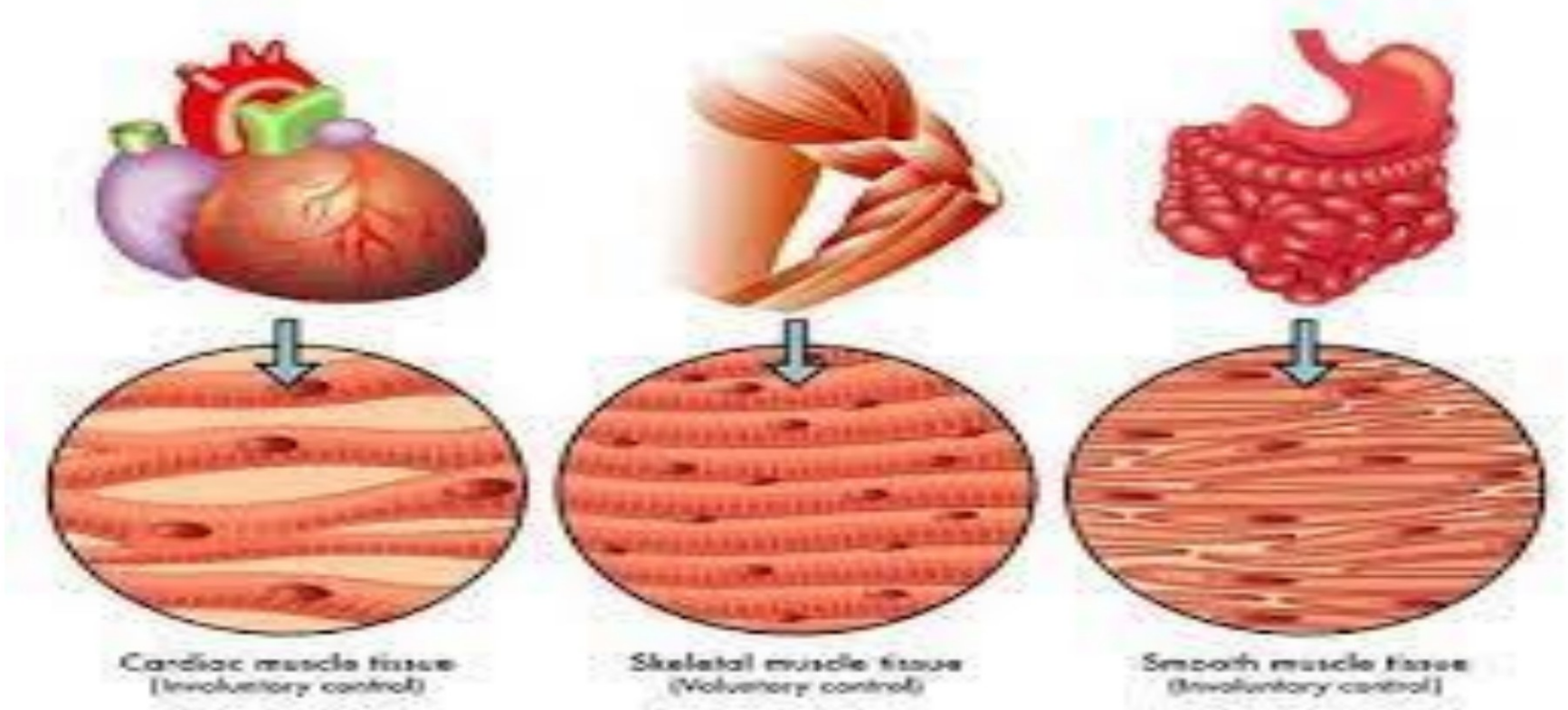

crash fiber this this Mane Alai

In general, skeletal muscle consists of two types of cells or fibers, slow-twitch (Slow twitch, Slow Oxidative, or Type I) and fast-twitch, Fast Glycolytic, or Type II. can differentiate muscle fibers with surgical method muscle already The samples were examined and analyzed under a microscope. laboratory This procedure is called Muscle Biopsy.

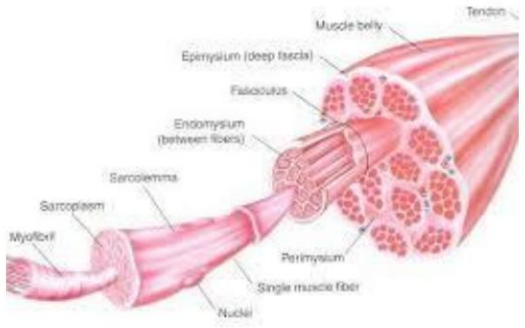

Figure 1: Muscle belly split into various component parts (from Essentials of Strength Training & Conditioning, National Strength & Conditioning Association)

a n this this
Characteristics Science of fibers Mane Alai

Skeletal muscle fibers can be divided into two types:

ÿ Slow-twitch skeletal muscle fibers ÿ Fast-

twitch skeletal muscle fibers

ÿ Slow-twitch, Slow oxidative or Type I skeletal muscle fibers.

fiber

which this type of fiber will have high number of myoglobin have mitochondria and a lot of capillaries, making the muscle fibers red in color, contracting slowly, slowly decomposing ATP, but resistant to fatigue well . This type of fiber is small and the nerves that feed small too Neurotransmitters are slow but have a high accumulation of triglycerides and have oxidative enzyme activity as well as a high energy efficiency economy. Marathon athletes will have a large amount of this type of skeletal muscle fibers .

ÿ Fast twitch, Glycolytic fiber or Type II. fiber

ÿ This type of fiber contains The number of myoglobin is less and there are less mitochondria and capillaries, so the fibers are white, contain a lot of glycogen, can decompose A.T.P. quickly, causing can shrink strongly and Fast but easy to get tired. In addition, there is a large size of fibers and large nerves to feed, resulting in fast nerve transmission, high accumulation of Phosphocreatine and Glycogen, and high Myosin ATPase activity. E athletes Sports, weight throws, discus throws, sharp jumps and sprinters are high in this fiber.

muscle fibers muscle fibers shrink rapidly What Type II is also divided into

ÿ FTa (lla, Fast-oxidative-glycolytic, FOG) ÿ FTb (IIb, Fast-Glycolytic, FG) ÿ FTc (Ilc, Undifferentiated, Intermediate)

Performance of the heart and circulatory system

In the human body, the heart and circulatory system have an important role in carrying oxygen, working muscles, and bringing waste products back out of the muscles. Therefore, the endurance of the muscles in exercise or training depends on the work. function of the circulatory heart when the muscles more work the heart and the system blood flow will to meet the needs of the muscles

physical fitness training or exercise aerobic exercise to develop can of the heart and circulatory system By using the level of almost maximum weight (Submaximal Exercise) , it should consider 4 important factors as follows:

ÿ Training style

ÿ Training intensity

ÿ Period

ÿ Frequency

n a

Type of exercise

type of exercise Physical fitness is related to specific training principles.

Training) To achieve maximum training success, it is necessary to rely on the continuous working relationship of the major muscle groups. aerobic dance or jogging and moving the feet alternately up and down are all activities that cause causing the body to use such muscle groups As for activities that use the upper and lower body in combination, rowing, swimming is another group of exercise that will help develop the ability to maximum anaerobic capacity Rhythm of movement and contraction of the major muscle groups will affect venous Rhythmic compression or contraction cause blood More flow back to the heart, the pumping of blood due to the contraction of the muscle groups. In such a way, known as muscle pump, has the effect of increasing blood flow back to the heart, which is important.

and necessary for training in work performance working with oxygen

decrease in exercise intensity a body

Encouraging the body to change By using the law of using heavier than usual in conjunction with the anaerobic energy production process. It will help to better understand how exercise or high-intensity training activates the anaerobic energy system to work more efficiently . develop physical fitness The load should be between 50-80% of the maximum oxygen consumption. which is related to the heart rate heart rate at 60-90% of maximum pulse rate . Therefore, when physical performance increases, it is necessary to adjust the intensity of training or exercise to increase appropriately as well.

The pulse rate while exercising can indicate Exercise intensity works best, however, there are other factors. Many other reasons cause This causes an increase in the pulse rate that is not associated with the exercise of this nature . pulse rate is not an indication of However, if the increase in the pulse rate is caused by the intensity of the exercise Exercise or training that meets the objectives and is suitable for the type or type of sport, the circulatory system will also be improved with increased efficiency.

Time to exercise down a body

aerobic exercise To get good results, it should take about 30 minutes each time and should exercise at least 3 days a week. to develop the circulatory system blood and maintain the level of performance to maintain for a long time, because when exercising reaches the target of the specified weight, the exercise will continue continue for another period Once at that level of intensity, it is a training for the body to do working with oxygen beyond normal conditions, thus increasing the ability to work in the body's systems higher efficiency

love n this in the exercise a body

In exercising well, in addition to having to do This is done using an appropriate level of intensity and a sufficiently long exercise duration. If the result is satisfactory, there should be time on a weekly basis. best effect And must have enough rest time to recuperate the body and prevent The problem of over training (Over Training) by having time to rest. At least 1 day a week or have to reduce the level of intensity in training to be less by inserting recreational activities to Athletes relieve stress instead. Target

Body warming before and after training or exercise, get down, get in shape

ÿ 1. Helps to increase the temperature of muscles and tissues in different parts of the body, reducing the risk of tissue injury .

function of the circulatory system As a result, the blood that feeds the system . Perception and command of the nervous system and muscles to be ready to work hard and perform tasks that require speed efficiently

area ÿ 3. Help adjust the movement mechanism

efficiency

benefits a n today the progress of manual exercise this n n n always

ÿ Reduce high blood

pressure ÿ Reduce

smoking ÿ Reduce high blood cholesterol

n a a a a
on birds Physical exercise sports
u u g

ÿ Hot weather

ÿ Cold weather

ทฤษฎีการฝึกซ้อมกีฬาอีสปอร์ต

อาจารย์ ดร. นธายุ วันทยะกุล

Components of the theory, playing the fiddle this n MokLa

Knowledge and understanding of the theory of sports training will enable us to understand the academic fundamentals. Related to the theory in various fields from the chart above, it can be seen that everything is related. The knowledge and understanding of the coach or trainer will lead This has resulted in a plan to develop athletes, sports teams as a systematic study of sports science and sports medicine continuously at present, resulting in the discovery of methods or processes that will be used to develop athletes. understanding of the mechanisms of the body knowing the working system function of the body changes of These are all things that the body knows about food that will generate energy for the body. Knowing how to prevent injuries and injury care What other Know the structural modern coaches or trainers need to learn and understand These 10 charts provide the basis for both the science and the social sciences that will lead to the preparation for the development of esports in a formal way. systematic and procedural which is the heart of e-sports training

components of physical fitness

The body will be able to move to perform techniques or sports skills of each type. must rely on the working mechanism of the body In particular, every system of the body must work in harmony with each other all the time. If any component is regressed or does not work fully, it will result in a linkage. causing other components to lose work efficiency goes down as well.

BIOMOTOR ABILITY

- muscle strength
- patience
- AEROBIC ENDURANCE
- ANAEROBIC ENDURANCE
- speed
- softness

- The relationship between the nervous system and muscles.

this

ÿ n

Ptraining base

Aptoverall physical fitness

In addition to learning and doing To understand the theory of e-sports training that requires many elements to come together in order to produce e-sports products, that is, the emergence of unique abilities. Notable upcoming e-athletes Sportsmen who are trained according to the training program that has been placed systematically. and appropriate for each esports athlete. Having a basic understanding of training methods to improve physical performance is It is a very important process. Esports athletes and Many trainers who know the various physical fitness training methods very well, but do not know when these various training methods will be practiced. used in training Without a precise understanding, it will make the training ineffective or may lead to injury to the esports athlete who is training.

n should start Beginning to practice physical fitness in this any area n l

Something that is often found in sports training. Most trainers know and understand each specific area of fitness training. But still do not know when to use that training method, causing confusion and making wrong decisions leading to developmental halts. And the ability of each athlete, so when the time for preparing the athletes is clearly known, then planning the training in accordance with the available time will make the training develop. Physical fitness can be effectively trained in conjunction with skill techniques. and clearly developed

patience

Beginning training in the early stages of every sport Must start with the foundation of patience. first which is the development of a working system using oxygen that will bring The endurance of the respiratory system, the circulatory system that is the basis for The importance of every sporting activity by the level of intensity, duration and frequency will be arranged to suit the type of sport. and physical condition of athletes The principle of training to develop endurance that is popularly used is the form of continuous training, which is an important basis that must be started first. and the next period will bring Incorporating the principle of interval training, with interval training, the body will to work harder and more violently and alternating different forms of resting. This method is known to affect development. Fast endurance performance and another principle that is discussed and applied along with it, especially while working practice to maintain Physical fitness level is RUNNING TRAINING ON DIFFERENT TERRAIN OR RUNNING AT MULTIPLE SPEEDS (FARTLEK TRAINING) . to work efficiently without anaerobic Simultaneously, it will develop a working system. It can work efficiently using oxygen depending on the terrain conditions. In conclusion, most of the body's endurance training uses running in different ways. came into being as a means of training as the main one.

strength

It is the next important thing to develop that should be accompanied by training. go with patience But the initial intensity level must be set to a light level and increase the amount more. more times have a short break Therefore, it is a job that is known as strength, endurance, which has a method. There are various forms of training in this manner, such as basic training by training processes that rely on resistance from one's own weight in various exercise positions. By providing a form of training stations (CIRCUIT TRAINING) there is also a way to train with resistance. By using exercise postures by tying the muscles in different parts of the body. Once developed, it will be brought into strength training by using weight training equipment (WEIGHT TRAINING), which is a strength training method that results in to develop of fast muscles The training pattern must be planned to determine the weight in accordance with the time and the readiness of the body. Weight training is considered a heavy resistance training. There is a risk of harm to the body, so there should be a supervisor and supervision. set a training schedule that is Professionals directly take care of it all the time.

speed

Speed is physical performance that is difficult to develop. Requires a lot of technique and expertise involved. There are many components of body movement speed. multiple elements Including the genetics , the working system of the muscles, the nervous system and the coordination of the body that indicates the movement that is The correct nature will therefore cause the maximum speed of each person.

n a

compassion

Flexibility is a physical capacity that must be developed from childhood. It can start training before the age of 10 and can be inserted at any stage of training. or duration of training Most of them are inserted during the warm-up or cool-down, in addition to making the muscles and the ligaments that hold the joints have good flexibility It will also help prevent injuries from playing sports and most importantly will affect the practice of sports skills techniques to meet the needs effectively.

a a a this this
combination of the nervous system and mane

The neuromuscular relationship is the basic physical performance that is important for movement or body movement Be natural and consistent with esports skills. By relying on the work process of the nervous system that is efficient in ordering, causing other components to act work quickly and has a good effect on technique practice Skills of eSports To be as effective as possible

This type of physical fitness development training must rely on training methods for the nervous system to command

The body has been working with more complex than normal movements, there are various movement directions, there is a change in the rhythm of the movement based on the form of the game. to intervene at This makes the movements of the body more complex. These methods will make the system of the body especially the nervous system Having learned and practiced correctly, will result in being used in the rhythm and time of playing to be effective. According to the needs of the players and produce good results Continue the game of e-sports competitions.

diagram mu show frog physical fitness training

a n a n Time to prepare birds sports

physical fitness	mi	July	August	September	Oct.	nov
patience	••	•••	•••	••	•	
strength	•	••	•••	•••	••	
speed	•	•	•••	•••	••	•
softness	•	•	•	•	•	•
relationship between nerve and muscle	•••	•••	•••	•••	•••	•••

fitness test

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definition of fitness

a

smooth tasks of a person in controlling, giving commands, and still being able to perform other missions

The body can deliver various cases, including the

n g this perfection without fatigue

in addition

this ÿ ÿ n this

Tget a hobby or leisure activity or activity, exercise, play effectively and safely. sports,

Divided into 2 types:

this

1.General physical fitness, including Health-related fitness and Motor skill-related fitness

2. Special physical fitness

health performance

Health-related fitness is a physical condition that consists of Y

- Endurance of the circulatory system and heart

- strength and durability of this glass

- weakness of the body

- body parts

mechanical skills

Motor skill-related fitness) is a component of motor skill that is important to motor skills .

this

basis for practice

specialized activities such as playing n sports

these elements, agility, speed and

reaction time (Speed &

this this

Reaction time) Palakkala mane

(Muscular power) and balance of the body

(Balance)

specific physical performance

specific physical abilities

(Special physical fitness)

means d. performance that athletes La will

Only for this type of quail

Speed & Reaction time

• Reaction time is the body's ability to respond to the movement and environment various elements in the race, such as lighting sound stimuli of an opponent.

• Reaction time is the But then there was an impulse (sound, light) and birds Perceiving (hearing, seeing) until I'm confused than response and decision time. When combined with the movement time, it starts with response time.

• Reaction time d b Noi Gu, the ability to make Nervous System

used more in Sports with rapid limb movements • Reaction time is

Do real practice in the classroom.

n
student
u

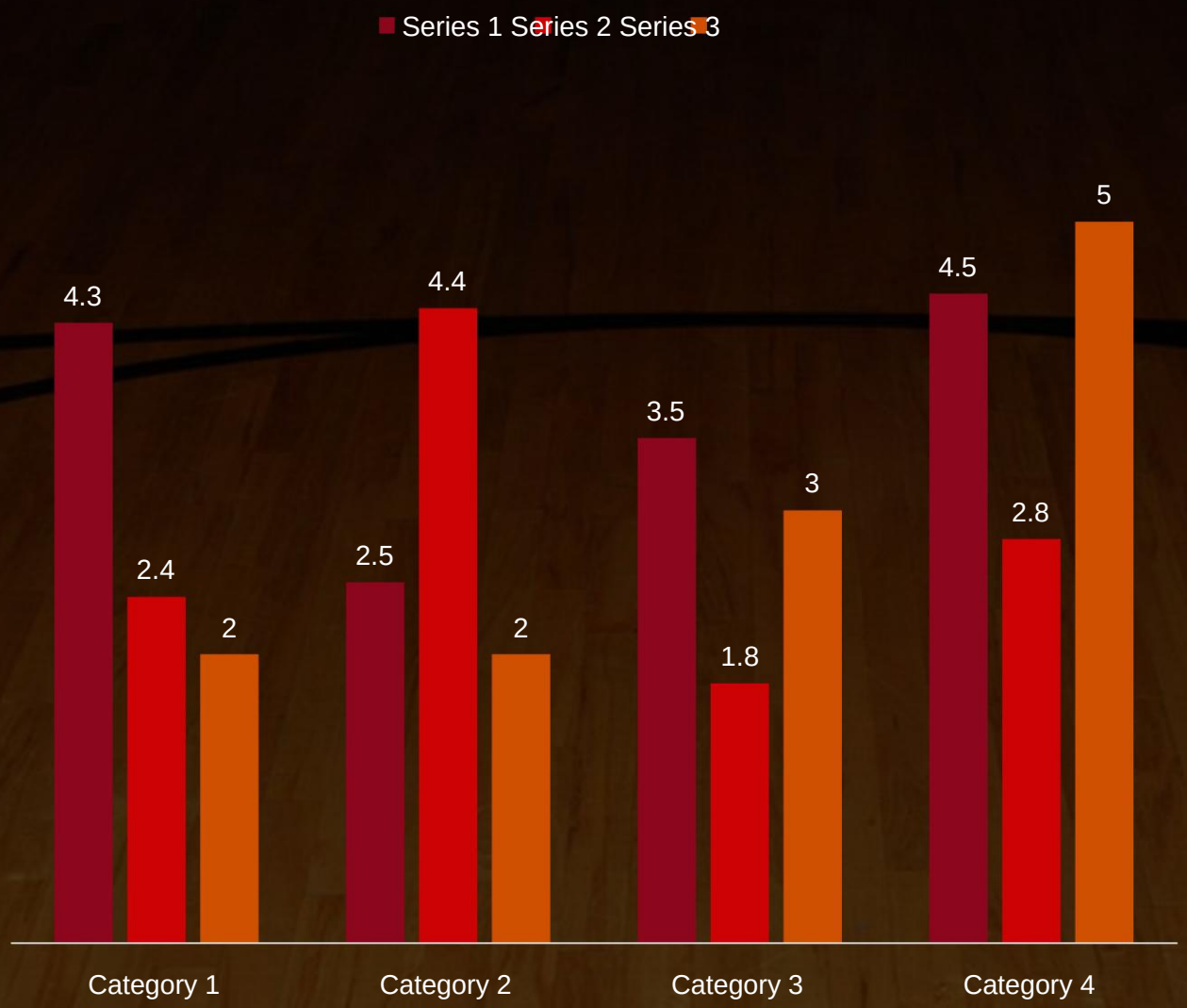
the
g drug response

n
urging

physical fitness test

- **General health check-ups** to look for any abnormalities in the body that may have wound to exercise Relax and play to measure pulse, blood pressure while at rest Temperature, breathing, physical examination by a doctor

- **The physical fitness test consists of :**
  - Body appearance
  - muscle strength
  - reflexes
  - balance
  - Softness
  - Agility and agility
  - Oxygen consumption performance
  - Non-oxygen performance



Benefits of testing

physical fitness

1. Athletes Selection
2. Practicing the fiddle
3. Evaluation
4. Prediction
5. Feedback
6. Classification
7. Motivation

please defective

Considerations for Selecting Performance Tests

• Standardized, multiple choice • Technical Standard

• Be suitable for the location, environment, test to see if this m and equipment a

• equipment, method, display, clarity n n

• The physical performance required for each type of this this n sports

• Corresponds to the characteristics and characteristics of the actual play in each each type n sports

• Duration of play or real matches ÿ

• Energy systems used by the body

Class	Group 1	Group 2
Class 1	82	95
Class 2	76	88
Class 3	84	90

n n

Please consider doing the test.

a

1. Health, body temperature emotional state of the test

2. Maturity, knowledge and skills of the test takers

this this

3. History of fiddle training m and reducing The weight of the person who took the test

n this

4. Preparation Yom Phon warm-up of the test subject

this this this

5. Conditions on the skin being tested Mortar, grass, planks, rubber, etc.

6. Calibration of the instrument (Calibration)

? this ÿ

score results and give value? Efficient score 7. How to

8. Results analysis, interpretation and feedback

Tools and tool quality checks

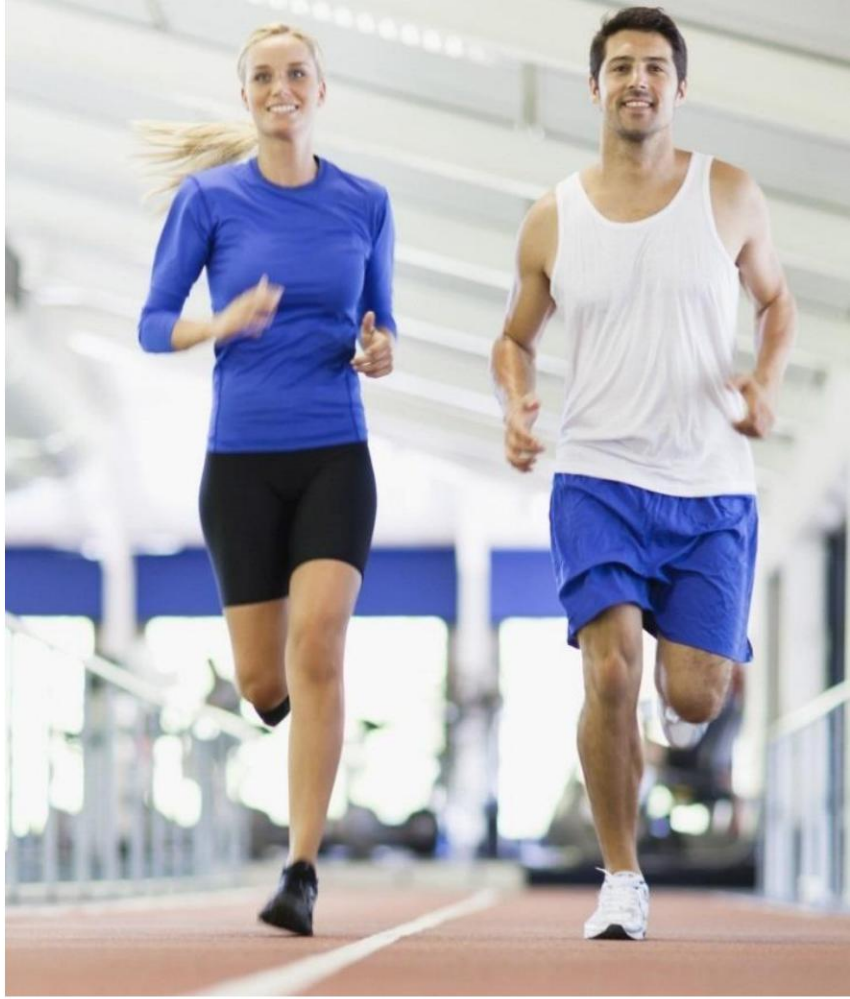
- Questions or problems in the research study
- Objectives of measurement
- Study variables
- Population and sample groups study
- this please pressure of the tool and selection of suitable measuring tools
- this of accuracy and bias

knowledge parts of the machine fitness test

- Must be accurate o Precision or Reliability
- Must be accurate or valid (Accuracy or Validity).
- Control for Possible Bias and error.

How to build fitness criteria

- Study documents
- collect information
- Create benchmarks.



How to test physical fitness

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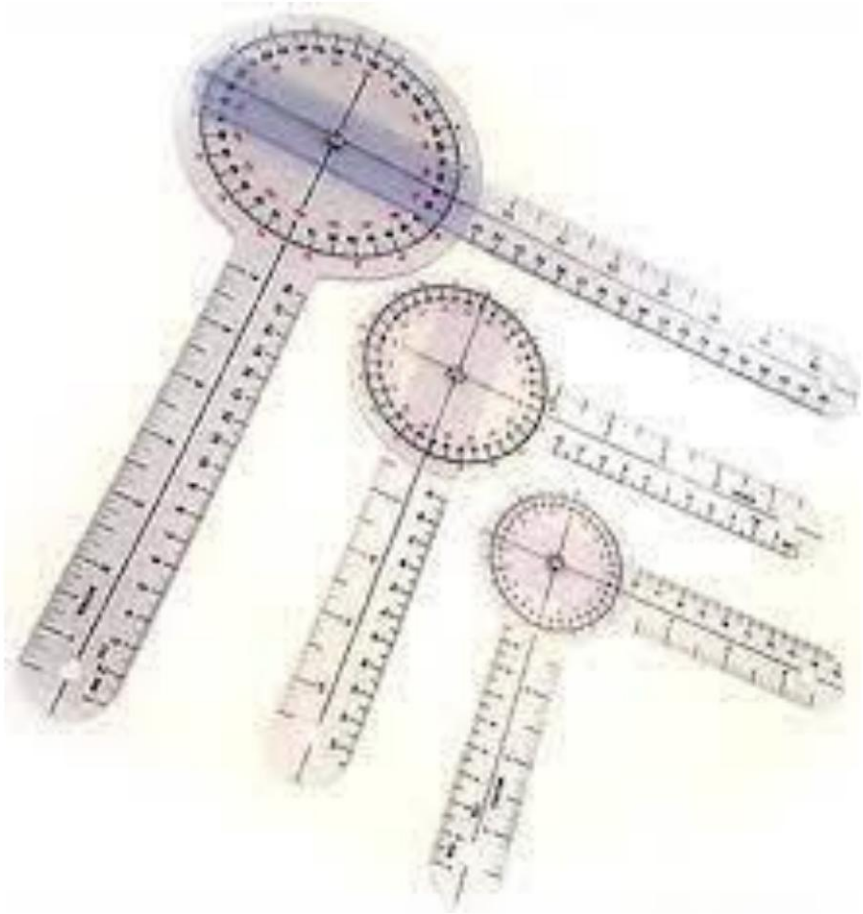
HEALTH RELATED PHYSICAL FITNEES TEST

Fitness parameter	Standard test	Prediction test
Muscular strength	Isokinetic measures 1- RM	Hand-grip dynamometer
Muscular endurance	Isokinetic measures Endurance test	1 min sit-up test
Joint flexibility	Goniometer measures Leighton flexometer	sit and reach test
Cardiorespiratory Endurance	Treadmill Vo2 max	Astrand cycle test, step test 1.5- mile run, 1.0 -mile jog
Body composition	**Hydrodensitometry**	**skin folds,** **Girth measurements**

MUSCULAR STRENGHT

MUSCULAR ENDURANCE

JOINT FLEXIBILITY



CARDIORESPIRATORY ENDURANCE

BODY COMPOSITION

PERFORMANCE RELATED FITNESS

ÿ Agility

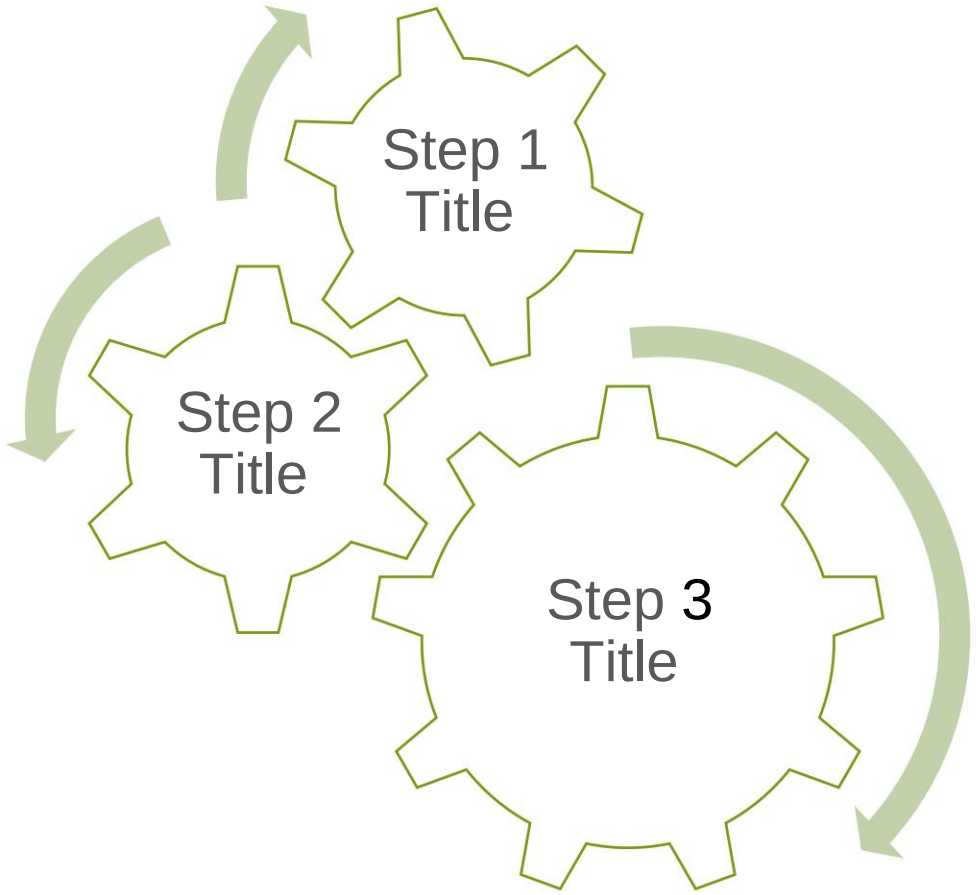
ÿ Balance

ÿ Coordination

ÿ Speed

ÿ Power

ÿ Reaction time



Objectives of the fitness test

ÿ Classification To classify the level of exercise capacity, to diagnose the efficiency of the musculoskeletal system. heart and circulatory system

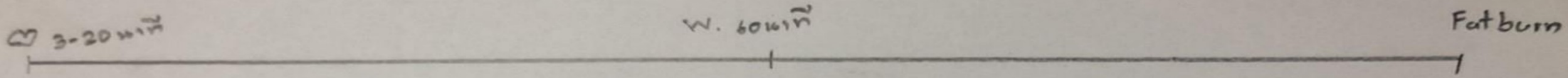
ÿ Diagnosis to diagnose the efficiency of the musculoskeletal system, the heart system and the blood circulation system.

ÿ Achievement to indicate the effectiveness of the fitness training program before and after training.

ÿ Motivation to assess exercise programs

ÿ Program evaluation to evaluate exercise programs ÿ Norm development

to establish and develop physical fitness benchmarks

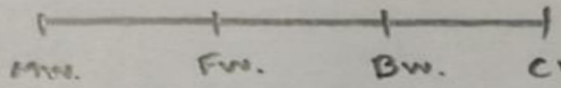


= 220 - Age

= 220 - 29

= 191 x 70-80 %

= 139 / min



1 RM

Str. ___ x 80 %. 8-10 ครั้ง

En. ___ x 70 %. 10-12 ครั้ง

Agi. ___ x 60 %. 15-20 ครั้ง

= 220 - Age

= 199 x 60 %.

= 119 /min

ขอบคุณภาพประกอบจาก : bodybuilding.com

Watch a video on how to test athletic performance. assembling classes

HTTPS://MUCOMPLEX.MAHIDOL.AC.TH/FITNESSTEST/INFO_ALL_EXAM.JSP;JSESSIONID=377DF525FAC46ECE61B4DD161D1847CF#

concentrate on e-sports

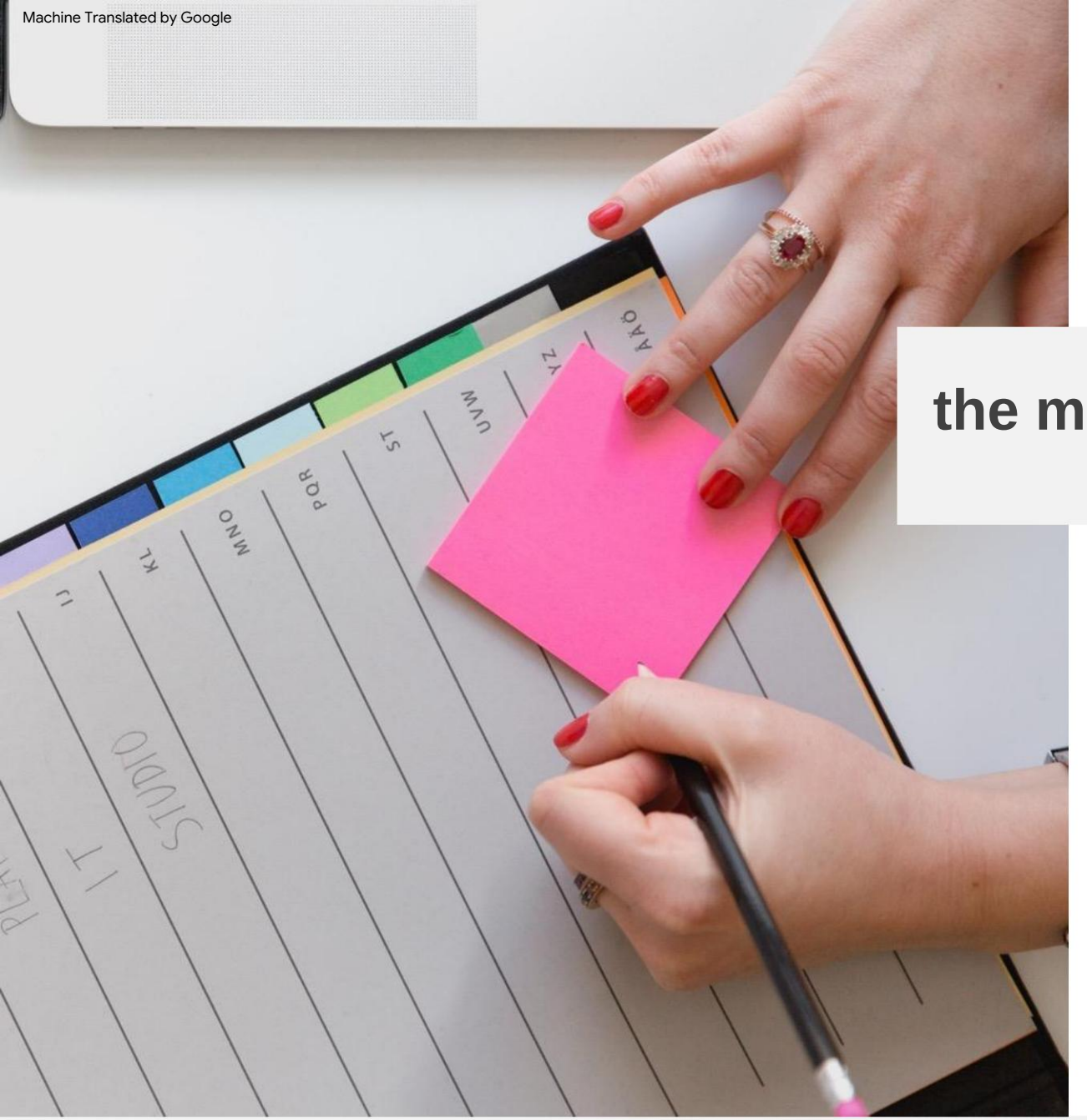
Lecturer Dr. Nathayu Wantayakul College of Innovation and Management Suan Sunandha Rajabhat University **Meditate**

research

Meditation is a word that Thai people are familiar with. It conveys the meaning of good things or virtues. If anyone can do it, then will receive praise from others On the other side, it can be used to relieve stress . People who meditate are often asked, what do you see after meditating? How can this meditation show the miraculous power ? It's a story that seems familiar with, but if asked this this the everyone

In the details of meditation, people will practice this a m a will not be sure this meditation for a long time. Samadhi will become a mystery, difficult to understand and practice to understand. According to the teachings in this u must be difficult

Buddhism, one subject at a time, may help to understand. Initial concentration in Buddhism has improved to the point that it can be practiced in daily life. Today will bring many benefits to life.



the meaning of meditation

"Samadhi" means “concern this The stamina of the mind" is the state in which the mind has emotions.

one day n Yo or ÿ the mind that the mind has fixed on something and only

Yes, according to Dharma n than “ Ekkakhata

right concentration

Right Meditation” is meditation in the right way which is meritorious.

wrong concentration

Miccha-samadhi” means concentration in the wrong way which is unwholesome.

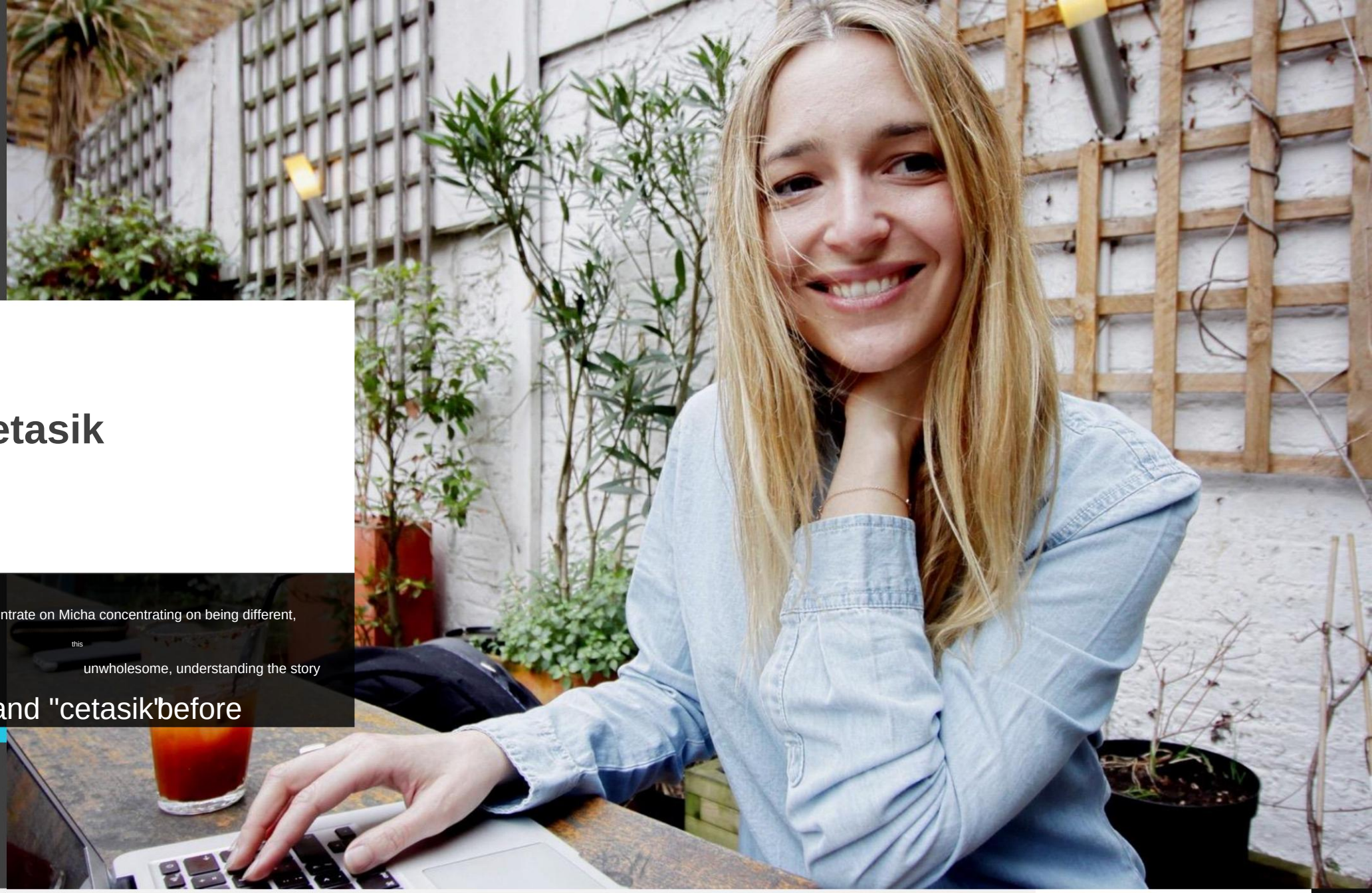
Mental and Chetasik

The way we will understand the mind and concentrate on Micha concentrating on being different,

this

How are they similar? How are they similar? unwholesome, understanding the story

The nature of "mind" and "cetasik" before



the meaning of mind

The mind is the nature of knowing emotions, thoughts, or the mind or spirit. The mind has two functions:
1. acts as a cognitive function, and 2. acts as the chairman of the United Nature. like a thick head different agencies
which in the morning usually this receive different matters that the secretary come on Consider acknowledging (perceiving emotions) when acknowledging.
considered are sent out. proposes to the head) to go out. Orders that Pre save bleed fate
or the behavior that we do through body, speech and mind (gymnastics, verbal and mental karma), the karma
not lost anywhere, will always accumulate time to effect that is or that has been done is called good deeds (good
yes or unwholesome action) constant return karma or meritorious karma) . go in

Meaning of Cetasik

1. Birth with the cetasika and the citta, associated with the mind as the cetasik characteristics.

The unrighteousness that is associated with the mind as the cetasik characteristics.

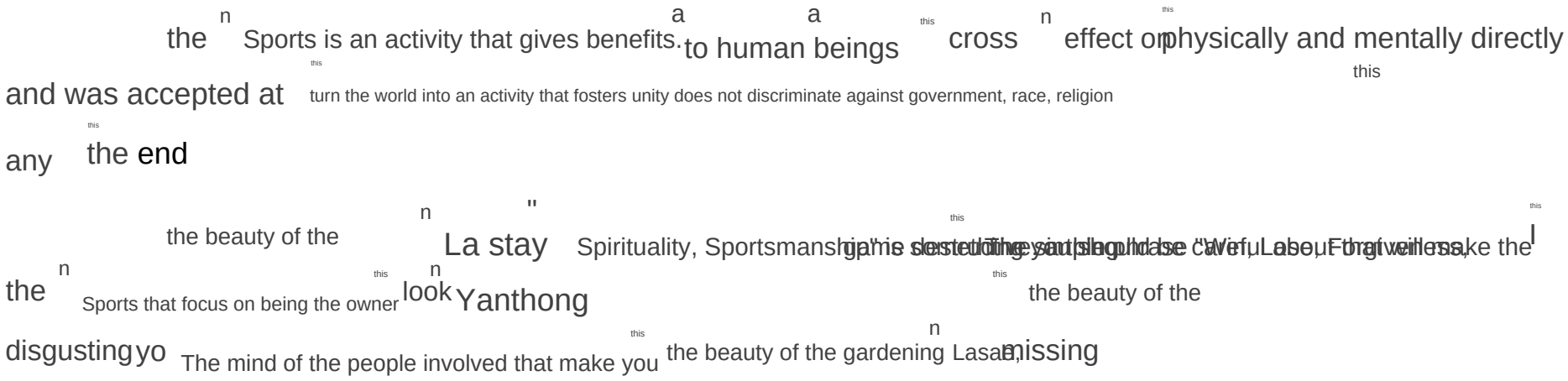
indulging in the mind

2. Dubporn Amokbhajit 3. m mood the 4 cittas. . _

Always together, wherever there is mentality, there is mentality, where there is mentality, because mentality arises, mentality arises with blessings.

Likewise, besides always being together, the mind and the intent are still the same. besides being the same thing Presstoo because mood dey and m but by nature the body This belongs to each person, such as Chit Pre. regularly which naturally Will be great, be the subject. Transparency reigns supreme in the glass or various containers, Chesik Pre continuation that is put into the water. When you are in a Yokkanas and Namsae Never AD addition, the same thing colors, they cannot be separated apart from having to use the method special place to separate the Get out of the mother's water. Is it big or president, but will it be change according to what that composes the citta, red put in water red put in water is S.K cetasika), such as taking the color, etc. Dhamma practicing the mind, we must right

sports



The "mind" of the "athlete" n n n I will this n Department u of Education n far a d this where to go

n Vinayak is generally accepted as 1. m n the school will have to this n Waniyat this What is within yourself is knowing how to control your mind ,

of their own, whether punctuality, responsibility, n able to control their temper and disciplinary n m consistency in training.

n this n no b Gay towards others, respecting the rules game, but without they may play against each other this, extremely dangerous. this action

cheat ÿ or child usage this or ÿ impulse this or ÿ accepting bribes, etc.

2. M. Gentle respect. coach, be h Respe ct for the Trainer, colleague m as well as individuals

Others in general, do not insult others even if we are superior, do not exalt yourself.

3. Must be a person who develops regularly, regardless of strength, technology, advancement in

Various things Wisdom Always careless, patient with hardships, hardships endure cold

will continue to suffer sometimes sometimes and most importantly endure the desires in our hearts, whether it is envy or jealousy.

anger, altruism

self, greed in rank, praise , virtue, is the training tool to retreat and obsession

We will continue baby

have a clean mind. “ Winning our own hearts

than any other victory on Ng

the field, which is bigger

this ÿ A

"giving"Be a person who knows how to detain the important 4. Steps 4 things too

this this this n this this

the most important things that a watch does not 4.1 Giving at a time of This is a message happiness For the sake of spreading the love and n take your heart

this

which is the importance of do. Are you wondering?

this

this this

4.2 Giving this Don't cause the heart to cause unity.

a this this

this

Say only what is true, which is one of the most benefit Ka said In terms of conveying meaning to be understood

ÿ n ?

important aspects of breaking through . suck An error occurred nop ng

n this

after Avoid using thank you heart

this ÿ this n n a this n

4.3 Giving w list of help at while playing sports and in everyday life always helping

ÿ n n this ÿ this n

these all the time mde In addition, have a heart to help. Those will be needed. Don't pass the time and spread it to others.

this n this

People Blaj Be loved by the person 4.4 many

this this a this

How to give and fall in love with sincerity towards one another stuff This is absolutely okay. I know how to

this this a

Appropriate for all levels. Know seniors. Respect others and respect teachers and mention behave and teach others by do not hide knowledge

5. Integrity la tongm Loyalty that is gained through self-conduct and self-discipline.

cheat are But it's a shame even though no one knows, the sky knows, there is no pride even though we always

6. Gratitude is for those who educate one that the detainee sports It is the virtue of the heart, especially and train oneself.

Meditation 40

Meditation 40 Meditation means that it is official the meaning of the work of the mind The one that allows the mind to work has that things that are used to meditate or to train the mind will be received.

The work is conscientious, peaceful and where you are, not wandering around, wandering around, or wandering about, how to concentrate as much as the commentary.

There are 40 specific destinations What is brought to the mind to determine for the name listed in the case.

A

Kasin 10

ÿ
as means of using external objects Objects has 10 things
Objects for concentrating in order to incentivize concentration

this ÿ
he A

this
a) Phukasin (Kasin is the great element) 4 is Pathavi (earth) Apon) techo (fire) wayo (wind)

(na b) Vanakasin (Kasin is color) 4 is Neel (green) Peet (yellow) Blood (red) Otat (white) c)

n this
The other Kasin is Alok (Saeng Sawang) Paricchinnagasre!lift air (gap)

boss u Pha 10

this ÿ
at the 10th humerus. Consider the corpse at different stages, totaling 10 stages, starting with the corpse no up to the rest

of the corpses, the list is full, but the skeletons of the 10 corpses present are difficult to consider, so they can be easy this where
have Uddhammataka (the no d) vinilka (corpse is a corpse) n n this assorted this waterflow

corpse is torn apart), Vicchadaka (the corpse is torn in two), Vikkhayataka (the corpse has been devoured by the stuchik), Vik.

ÿ
scattered m His head fell out of fear. Khhittaka (corpses), havikhittaka (corpses cut into pieces), hemataka (blood-

soaked corpses), puravaka (corpses covered with worms), atthika (The corpse left the bones) But the body of bones or

ÿ the ? ÿ

Memorial 10 c mood a beauty that should be remembered kt neglect contemplating Buddhanussati remembering the Buddha, and others 1. 2. Dhammanussati remembering the

Dhamma. and contemplating the virtues of the Dhamma 4. Silanussati, remembering precepts, contemplating one's own precepts that have

been performed flawlessly, 5. Jakanussati, recalling the charities that one had donated. and contemplating the virtue of generosity and self-

sacrifice inherent in oneself. Refers to the body, that is, the 32 parts of the body, which are disgusting and ugly. because they are made up of different

their own virtues to the deities that one has heard and contemplated, which could make them become deities, as they exist

parts.

ordinary

morality consider this 8. Body consciousness in the body? ÿ Aroon ? kt ?

Determine to consider the bodyor this this ÿ

Knowing justly, the calm this not this Enthusiasm, infatuation 9. Anapanstika Set his breath out. 10. this Upasamanu

Stirl ? kt state of the body is nirvana, and contemplating the virtues of nirvana, that is the relief of defilement and suffering.

disgusting

Appapanya 4 The unrighteousness that prevails in human beings There are not many things. The mind is stable all over the place.

Quantities, not limited by scope, most often In addition, Brahmavahirana 4 (the most noble amulet of the Dharma) is

1. Compassion, love, longing for human beings Do you have goodwill? body happiness at all times.

2. Please take pity on me. I want to help you. Give others a from suffering

3. Mudita, Pleasure chance to have a joyful heart when others are well. happiness and prosperity

great success go on

4. equanimity, neutral-minded according to Awangchitra Calm, consistent, straightforward, like a watch beings human many

get good results the factors involved, not inclined to Do you like it? how

Ahare , the contractual act means that it is the waste in the food , **the cattutuvatthana** determines the four elements, one's

ÿ a

body as only the four elements, considers the condition that is The concrete is an emotion that can only be used by [illegible] on the first five objects, asking for one of the four forms. He has

this this

mood

mood Oh, there are six things that the mind knows and emotions naturally

1. Image Asaeng? are that come to the eye.

2. Sattÿtÿmana no Yong that hits the ear

3. Gandharam is the smell that strikes the olfactory senses in the nose ,

Touchtapparaman is the body. the taste that strikes the tongue 4. Rasaramma 5.

Yen R Yen weak, stiff and intense movement that affects the various senses in the

6. Thammasat is the feeling, the form a the various thoughts that he brought to his heart th things he did affect Phat Thatsix

in which the body perceives things, is the 40 make the mind aware ng Rather than being emotional of Jit Dangan Meditation 40

emotions that the meditator will react to. Say 1 thing to keep the mind focused on the mood. none day yok

This will cause concentration.

The practitioner of meditation must decide Which of these 40 meditations before in meditation

Education Before this meditation What is the mood? mood I will continue

to concentrate) and then the perceptual The mind can perceive

emotions.

Jit 6

Honest 6 Honest Ajariya means normal behavior.

To behave in any way according to the normal mental state of the person

In other words , conduct, a person who has character and conduct in a moral manner . There are six major types of morality:

The nature of the mind personality traits

behavior character

Children are more ethical, such as people more ethical than

1. Sensual conduct Has a character that is heavy on sensuality, that is, loving beauty, loving beauty, tenderness, should use the opposite meditation Asupha (and body)

2. A person who is angry is normal behavior. Characteristics are heavy towards anger, behavior, heavy towards impatience. severe irritability The ideal meditation is Metta (including other brahmaviharas and Kasin, especially Wankasin) . Characteristics are heavy towards anger, heavy behavior towards ignorance , inquiring, listening to the Dhamma, conversing. lonely Confused, ignorant, who said what? wait follow you with the beginning

Dharma according to the time Oigu Bakru (Meditation Agoul Anapanasati

4. Faithful person who has faith normal behavior having a character of great faith, behaving hard in a way that is conducive to what zzz Cheerful, easy-going e is worthy of faith and rational belief, such as

Remembering the Three Jewels and one's own precepts (Anusati 6 Kham All right)

First Dai, 5. Buddhacharit or Yancharit) normal behavior have character behave hard in a practical way Thinking, considering and looking at the beauty of

truth that gives wisdom, for example, considering the trilaksana (the appropriate meditation is death, upsamanusati, jatuthatvawatthana, ahare patikulsanya). 6. Vaticka, I know, Vaticka is normal behavior, characterized by the habit of behaving in a favorable way, contemplating things that induce

emotions, such as developing Anapanasati (or Pengkasin, etc.) Thinking through the distraction gad

vision

or vision that is used as a sign for designating an image or a picture that is seen in the mind that represents the vision

Meditation is divided into 3 steps

breathing that is determined, or determined to accompany the mind, progressing as defined

Buddha

emotional

2) Ukhakhanimit means that visions that the mind is movie or I until

yes able to see clearly turn into an eye-catching image, for example, Kasin's eyes are so focused that they are stuck in the eye.

3) Patipha-nimit means the vision is the On Nimit Khun Prea Yup or vision yep k Yong Dai to the vision that is the likeness of

same as the equanimity itself, but it further, until it is an image arising from the contract of the one who has acquired it. pure and without

is flawless and without any impurity. Can you expand it? Please do as you wish.

pray 3 steps

1. Meditation meditation service The default is to set or bring out visions of things that are used as meditative

For example, focusing on the Duang Kasin Ka, observing his breath. emotions that hit the tip of the nose or on D. Buddhakhun is an emotion. that is in a

self mind It's easy to say that it's the vision that sets forth when the mind sets. meditation (that is, the vision)

nuntil it can be seen picture this thing persistent, precise Born as a vision, the mind is concentrated, we started what

Meditation (that is, Kanika Meditation)

2. Upaparabhÿna: the development of concentration caregiver for the consciousness of meditation

until the steadfastness and attachment in the mind arises as a vision N Nirot the calm (in meditation without objects

focus on mood There is no mind, no vision, determination with the mind, so firm that Nirvana is Suspended only)

mind O the guideline of meditation. The highest value of meditation

3. Improving meditation concentrate trying to keep divine food, etc. Addicted to impending visions, already consistent with non-sappa patrons

it from deteriorating by at the location of Gwain

Do not consume anything that is sappaya and know how to act according to the methods that will help bring about misfortune, such as reassuring

pod the mind, until finally becoming self. Improving concentration, attaining the At the beginning of the meditation hall

concentrate

this this ÿ Is this a lot?

Maintaining the concentration of the Dhamma practitioners who practice this not reaching the mind

meditation effectively maintain the practiced concentration well by doing alms , observing the precepts, and practicing meditation on a regular basis. always for life

this n this

will you apply? but progress that Now and in the future, the happiness

Thank You

Nutrition and esports

Lecturer Dr. Nathayu Wantayakul

College of Innovation and Management

สารอาหารกับการกีฬา

food and nutrition the foundation of health, hygiene and well-being happiness of the people in the country from childhood to old age that we will be healthy good or not It depends on many factors, be it genetic factors, mental health, way of life, environment, or even factors. Regarding food and eating, our body will be completely healthy, it depends on food that is useful, hygienic, in sufficient quantity for the needs, free from toxins, contaminants , additives that cause harm to the body

อาหารและโภชนาการ

The Royal Institute Dictionary defines the word food as food , life-sustaining tool, or life-sustaining tool. The word nutrition (Nutrition) means a branch of applied science. relationship between food and various processes related to the health and growth of living organisms, nutrition has a scientific meaning. about food in various aspects , which food may be You can eat food that is beneficial or harmful.

Nutrients according to nutritional principles

- carbohydrates
- fat
- protein
- vitamins
- minerals
- water

โภชนาบัญญัติ 9 ประการ

The main principle of nutrition is to eat a sufficient quantity and nutritional value, with the nutrients and energy received by the body to be balanced. neither too much nor too little The Ministry of Public Health and Mahidol University have prepared Food Based Dietary Guidelines for Thais; FBDG takes into account the food that Thai people eat regularly, their behaviors and related cultures. as well as information on epidemiology (Epidemiology) in nutrition and public health problems

ÿ Eat food from 5 food groups, each food group is varied and always take care of body weight.

ÿ Eat rice as the main meal, alternating with starchy foods for some meals.

ÿ Eat a lot of vegetables and fruit regularly.

ÿ Eat fish, lean meat, eggs and legumes regularly.

ÿ Age-appropriate drinking milk

ÿ Eat fatty foods, but in moderation.

ÿ Avoid very sweet and salty foods.

ÿ Eat clean food free from contamination

ÿ Abstain or reduce alcoholic beverages

สารอาหารกับพลังงาน

Energy is the ability to do work. The world's first source of energy was the sun. Green plants and some living things on Earth, which contain a pigment called chlorophyll, can convert solar energy into energy. Chemical energy is stored in the form of starch in various parts of the plant by the process of photosynthesis (photosynthesis) main component The animal body digests food and absorbs nutrients into the body. The animals benefit from the plants. Energy from nutrients for work function of various organs in the body, including for growth

when we have eaten The body digests food and absorbs nutrients into the bloodstream. Blood transports different types of nutrients to the cells. When cells throughout the body receive nutrients, the cells break down those nutrients for energy to be used in various body processes.

หน่วยวัดพลังงาน

The energy in food can be measured by The food is burned in an instrument called the Bomb Calorimeter and the unit of energy measurement is calories, which generally means kilocalories. The amount of energy 1 kilocalorie refers to the amount of heat that causes the amount of water 1 kg with a temperature increase of 1 °C.

In addition to the kilocalorie unit It is also popular to measure food energy in joules (Joule, J). 1 joule of energy means the amount of energy used to move an object weighing 1 kg to move a distance of 1 meter with a force of 1 Newton, 1 kilo. A calorie is equal to 4.184 kilojoules (1 kcal = 4.184 kJ).

Of the 6 types of nutrients, only 3 provide energy to the body, called macronutrient or fuel nutrient, which are carbohydrates, protein and fat . The body is not equal, that is, the energy obtained from the breakdown of carbohydrate nutrients. Each 1 gram of fat and protein is equal to 4 kcal, 9 kcal and 4 kcal , respectively. Energy for the body as well, 1 gram of alcohol will provide up to 7 kcal of energy, however, although alcohol will provide energy to the body. But we do not classify liquor as a nutrient because in addition to not providing benefits, there are also Numerous penalties to the body

ประโยชน์ของพลังงานที่ร่างกายได้รับจากอาหาร

ÿ The movement of the body, walking, standing, sitting, requires the work of the muscles. The muscles use energy. about 25 percent of the energy received for body movement

ÿ The work of various organs in the body, while sleeping, the various organs are still functioning normally, the heart is still beating , the blood is still circulating, and the lungs still have to exchange gases as normal, so energy is about 50 percent of the energy The received body will be used for doing the work. function of various organs in the body

ÿ excretion of waste from the body Excretion of waste from the body in the form of urine or feces requires about 8 percent of the energy received.

ÿ lost in the form of heat Part of the energy from the breakdown of food will be lost from the body for nothing in the form of heat, about 10 percent of the energy received.

ÿ Store about 7% of the energy received

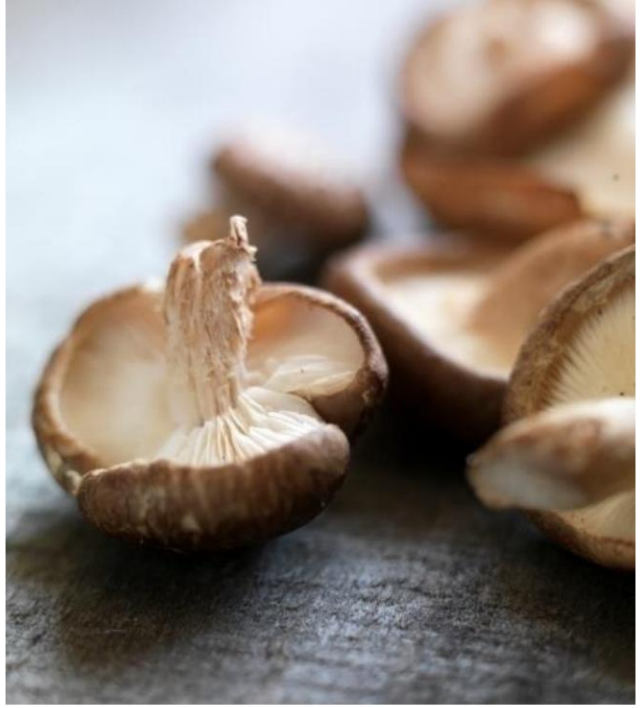
ปัจจัยที่สัมพันธ์กับการใช้พลังงานของร่างกาย

In addition to having to eat food in order for the body to receive complete nutrients, the amount of energy that each person receives should be balanced with the energy consumed by the body The amount of energy that each adult should get depends on gender, age, occupation, activity, body size and composition, and climate.

วิธีวัดการใช้พลังงานของร่างกาย

ÿ Direct calorimetry is a measurement method in which the subject is placed in a special chamber to measure the heat generated by the body. This method has a lot of discrepancies. therefore currently used method of measurement, indirect instead

ÿ Indirect calorimetry measures the amount of oxygen the body uses to break down nutrients over a specified period of time, as well as measures the amount of carbon dioxide as a product of the breakdown process. The value obtained by measuring these two gases is called the respiratory quotient.



R.Q. = ปริมาณ CO2 / ปริมาณ O2

- carbohydrates = 1
- fat = 0.7
- Protein = 0.8

คาร์โบไฮเดรต

Carbohydrates Carbohydrates are It is the main nutrient that provides energy to the body. Carbohydrates refer to carbon. saturated with water, carbohydrate molecules It consists of 3 essential elements: carbon, hydrogen and oxygen. The general molecular form is

C1H12O6, the ratio of hydrogen and oxygen molecules is the same as that of water molecules, which is 2 : 1.

ประเภทของคาร์โบไฮเดรต

carbohydrate structure Carbohydrates can be divided into 3 types: sugars (Sugar) Oligosaccharides (oligosaccharide) and polysaccharide (Polysaccharide) sugar (sugar) Sugar is divided into 3 subgroups: group 1 single sugar (monosaccharide or simple sugar) Group 2 sugar (disaccharide) Group 3 sugar alcohol (polyol)

โอลิโกแซกคาไรด์ (OLIGOSACCHARIDE)

Aligosaccharides carbohydrates with a larger structure Sugars and smaller than polysaccharides can be divided into 2 major categories:

1. Malto-oligosaccharide, including maltodextrin (maltodextrin) is a carbohydrate that Occurs during the digestion process of starch and combines with other types of carbohydrates. 2. Resistant oligosaccharide (Non-digestible Oligosaccharide) is a

carbohydrate that Enzymes in the digestive system cannot be digested, so it does not raise the level of sugar in the blood. It can be found in foods such as wheat, rye, onions, asparagus, etc.

พอลีแซกคาไรด์ (POLYSACCHARIDE)

Sometimes referred to as “multi-sugar,” it is a carbohydrate that is made up of sugar. A large number of monosaccharides are connected together like a long chain. large molecules has a complex structure when decomposed Until the final stage, you will get a single layer of sugar. There are two main types of polysaccharides, starch and non-starch multilayer sugar (NSP).

บทบาทและความสำคัญของคาร์โบไฮเดรต

ÿ is an important source of energy the importance of the body

ÿ Helps the body reserve the use of protein as as a source of energy because protein is necessary for the functioning of cells, including components of muscles, hormones, enzymes and many important substances in the body

ÿ Helps the process of lipolysis completely

ÿ Fructo-oligosaccharide carbohydrates help increase the number of acidic bacteria beneficial to the body and reduce the number of pathogenic bacteria in the colon, reducing the process of carcinogenesis that causes cancer. large intestine

ÿ Non-starchy, multi-layered carbohydrates help increase fiber intake thus helping with excretion, including faeces

ÿ is a component of substances Some important substances in the body are heparin, DNA (DNA), and RNA (RNA), etc.

โปรตีน (PROTEIN)

Proteins are organic nitrogen compounds (nitrogenous organic compounds), that is, protein molecules, in addition to containing carbon, hydrogen and oxygen, also contain nitrogen as the main element. Proteins are very large and complex molecules. Proteins are It is an important constituent of the protoplasm and nucleus of the cell. When hydrolysis of proteins by water (hydrolysis) in

concentrated acids or bases or by heat or enzymes, proteins decompose into Substances with smaller molecules This substance is called "amino acid" (amino acid), which has properties as both acids and bases because in all amino acid molecules contain functional groups. carboxyl group (COOH), which exhibits acidic and functional group properties type of amino group (amino group, NH2), which exhibits base properties.

Protein is the most abundant compound in the body. It is second only to water. The body is made up of many different types of proteins. Each type of protein contains sorted amino acids together and connected together a chemical bond called "peptide bond" (peptide linkage), so 2 amino acid molecules are linked together Dipeptide bonds Three amino acids are joined by tripeptide bonds, and four or more amino acids are joined by polypeptide bonds. polypeptide)

ประเภทของโปรตีน

There are three classification criteria for proteins: physical and chemical properties.

Shape type and categorized according to nutritional properties 1. Types of proteins according to their physical properties physical and chemical This criterion is determined by the solubility of the protein. divided into 3 types of proteins

1. Simple proteins (simple proteins) refer to proteins that when decomposed by acids or bases Only amino acids are obtained as products.

2. Types of proteins according to shape can be divided into 2 types

2.1 Fibrous proteins consist of polypeptides arranged in long strands or coiled into Spiral does not dissolve in the part The body's fluids are keratin, collagen and elastin.

2.2 globular proteins are spherical in shape and easily changed when exposed to heat or base acid dissolved in part body fluids nutritious more than linear protein, i.e. albumin in egg white, casein in milk 3

3. Types of protein according to nutritional properties, divided into 3 groups

3.1 Complete protein or high-quality protein is protein that consists of all kinds of amino acids that are essential for the body and in an appropriate amount for the body to promote metabolism. grow and repair worn parts Most of them are obtained from animal products. and soy

3.2 Partially incomplete protein, i.e. protein with acid content

Amino in the amount and proportion that is sufficient for repairing damaged parts but not enough for growth.

3.3 Totally incomplete proteins are proteins that contain a

Mino in the amount and proportion that is not enough to repair the wear and tear and growth of the body.

บทบาทและความสำคัญของโปรตีน

1. Build and repair damaged tissues

2. Make proteins that make responsible for controlling various processes of the body, including enzymes, hormones, immune substances

3. Help maintain water balance in the body (water balance), proteins in the blood help regulate exchange. or fluid movement between blood and cells If the protein content in the blood is low, the osmotic pressure in the blood is also lowered, and blood fluid diffuses and accumulates in the surrounding fluid. Too many cells can cause swelling (edema).

4. Maintain the body's acid-base balance and SS

5. Provide energy to the body Normally, the body will not bring The protein is broken down to provide energy. Because the body suffers from the degradation of protein , that is, it causes the body to lose heat. more useless and the body needs energy to Proteins are removed from the body in the form of urea. In this regard, the liver and kidneys are the hard-working organs.

6. Helps to eliminate certain toxins, for example, when the body receives benzoic acid (benzoic acid), which is used as a food preservative.

Canned The liver will destroy benzoic acid by combining benzoic acid with amino acid glycine to form hippuric acid and excreted from the body via urine

ลิพิด (LIPID)

Lipids are the chemical name for fats, oils and related compounds such as cholesterol and lecithin. They are in solid state, while oil is in liquid state. organic solvents such as ether, benzene, alcohol, lipid molecular structure It contains carbon, hydrogen and oxygen, like carbohydrates. But unlike carbohydrates, the ratio between Hydrogen to oxygen, i.e. carbohydrates have a hydrogen to oxygen ratio. Oxygen is 2:1, but the hydrogen to oxygen ratio in lipids is greater than 2:1. Fat is the nutrient that provides the most energy. 1 gram of fat provides approximately 9 kcal of energy. needs of the body The body will accumulate energy. that excess in the form of triglycerides in adipose tissue without limitation. When breaking down 1 molecule of fat, fat will be broken down to yield 3 molecules of fatty acid and 1 molecule of glycerol.

ประเภทลิพิด

Types of Lipids Lipids can be divided into three main types:

1. Simple lipids (simple lipids) are found in both plant and animal fats. In general, it can be found in 3 forms: monoglycerides. (monoglygeride), diglyceride (diglyceride) and triglyceride (triglyceride), of which triglycerides are the fat that people eat the most.

2. Compound lipids are simple lipids that contain other substances such as carbohydrates, phosphates or compounds. Nitrogen is included. Compound lipids that are important for human nutrition.

3. Deried lipids are lipids obtained by the breakdown of simple lipids or compound lipids.

กรดไขมัน (FATTY ACID)

Most fatty acids are found in the form of triglycerides or in combination with other fats. Fatty acids differ in carbon chain length and saturation size. The long chain fatty acids found in most foods are insoluble, while the medium and short chain fatty acids found in egg yolks and milk are water soluble. Therefore, it is solid at room temperature, such as pork fat, beef fat, less saturated fat, usually has a medium chain and liquid state, such as cod liver oil, olive oil,

ประเภทกรดไขมัน

Types of fatty acids Fatty acids can be classified according to their satiety properties. and needs of the body can be as follows

1. Saturated Fatty Acids

1.1 Saturated fatty acids are fatty acids in which the arm of the carbon atom is a single bond (single bond), so it cannot bind to free hydrogen. This fatty acid is easily solidified when gets a little cold Saturated fatty acids are found in animal fats such as beef fat, pork fat, and some plant fats such as coconut oil.

1.2 Unsaturated fatty acids are fatty acids in which the arms of the carbon atom can be both single bonds and double bonds (double bonds), so carbon with double bond arms can bind to free hydrogen again. this fatty acid Most of them are in liquid form, i.e. oil, and found in vegetable oil, fish oil, and general marine animals.

2. Fatty acids according to the needs of the body

2.1 Essential fatty acids (essential fatty acids) are fatty acids that our body cannot produce by itself in sufficient quantities and must be obtained from food. Essential fatty acids can be divided into 2 The family is the linoleic acid family (linoleic acid) and the linolenic acid family (linolenic acid). Both of these 2 families of fatty acids, when the body receives them, can be converted into other types of fatty acids

2.2 Nonessential fatty acids are fatty acids that the body obtains from portion of food And another part that the body can create by itself is palmitoleic acid and oleic acid family.

บทบาทและความสำคัญของลิพิด

1. It is a component of the cell membrane and is important for the formation of nerve cells.

2. It is an important source of energy important under normal circumstances Fat provides 40% of total energy. In the absence of food, it provides energy. almost 100 percent

3. Help dissolve fat-soluble vitamins, including vitamin A, D, E and vitamin K.

4. Prevent impact of internal organs

5. It is important for skin health.

6. Can change to carbohydrates and non-essential fatty acids when needed by the body

7. to keep the body warm

8. Cholesterol is essential for the production of vitamin D. adrenal hormones, sex hormones, and bile salts

วิตามิน (VITAMIN)

Vitamins are organic compounds that do not provide energy and do not They are components of any tissue, but they are essential for life. There are approximately 20 types of vitamins that play a role in human nutrition. Each type of vitamin has a different function and need. One of the important functions of vitamins is to act as a coenzyme. a little In order for the chemical reactions in the body to be unable to produce vitamins by themselves, or to create them, there is insufficient amount to meet the needs, so it must be obtained from food.

ประเภทวิตามิน

vitamin type Vitamins can be classified into two types based on their solubility properties:

The fat-soluble vitamins are vitamin A, D, E, and K. Water- soluble vitamins are the B vitamins and vitamin C.

B vitamins can be classified into several types such as vitamin B1 or thiamin, vitamin B2 or riboflavin, vitamin B6 or pyridoxine, vitamin B12 or cobalamin, etc.

The name of the vitamin is romanized because of the early discovery of vitamins. Scientists still do not know the formula , chemical structure of vitamins. Therefore called the name of the vitamin. By using letters in order, such as vitamin A (A), B (B), C. (C) D (D) or name a vitamin after the abbreviation of its function, such as vitamin K. The letter K stands for koagulation.

บทบาทและความสำคัญของวิตามิน

1. is a coenzyme Most of the water-soluble vitamins act as coenzymes, helping the work of various reactions in the body.

2. Helps in the synthesis of some proteins and is involved in the process of cell transformation (cell differentiation) 3.

Promote growth

แร่ธาตุ (MINERAL)

Minerals are inorganic substances that are indispensable to the body. There are more than 60 minerals, but only 17 of them play an important role in nutrition. Minerals in the body account for 4-5% of the body's weight each day. The body in the form of various salts, such as sodium, potassium, calcium, magnesium, through urine, feces and sweat about 20-30 grams, so we should get a balanced amount of minerals with the amount that is lost.

ประเภทแร่ธาตุ

1. minerals that need large amounts (macromineral or major mineral) is a mineral found in large amounts in the body And the body needs more than 100 milligrams per day, including calcium (Ca), phosphorus (P), magnesium (Mg), potassium (K), sodium. (Na) Chlorine (CI) Sulfur (S)

Trace minerals are minerals that are present in small amounts in the body . And the body needs less than 100 milligrams per day, including iron (Fe), iodine (I), fluorine (F), selenium (Se), copper (Cu), cobalt (Co), manganese (Mn), molybdenum (Mo), chromium (Cr).) Zinc (Zn)

บทบาทและความสำคัญของแร่ธาตุ

1. It is a component of organ systems such as calcium, phosphorus and magnesium. It is a component of bones and teeth. Sulfur is a component of muscles. Phosphorus is a component of nervous tissue.

2. Helps to accelerate biochemical reactions in the body such as iron is a component of the enzyme catalase (catalase) and cytochrome (cytochrome), magnesium helps catalyze the breakdown of glucose to get energy 3. 3. is a component of protein Iron is a component of hemoglobin 4. is a component of hormones For example, iodine is a component of the hormone thyroxin (thyroxin) Zinc is a component of the hormone insulin (insulin)

5. As a component of vitamins such as cobalt as a component of vitamin B12 (cobalamin), sulfur as a component of vitamin B1 (thiamine).

6. Control water balance in the body by sodium and potassium.

7. Regulates the acid-base balance in the body by sodium, potassium, phosphorus and chlorine . Controls the contraction and relaxation of the muscles.

น้ำ (WATER)

The body is about 60 percent water by weight. If the body loses 10 percent of water, it will feel sick, but if it loses 20 percent of water, it may die. Water plays a role in the body as follows:

1. is a component of cells and blood as well as various fluids in the body

2. Acts as an intermediary for various chemical reactions in

the body 3. Serves to protect various tissues of the body 10

4. As a solvent for various substances in the body

5. Help regulate body temperature to normal 6. Help

lubricate and prevent Prevents the friction of various organs .

7. 7 maintain acid-base balance in the body

น้ำในร่างกาย

Everything in the body is divided into two main parts:

1. Water in the cell (Intracellular fluid, ICF) is about 38% of body weight. It serves to dissolve various substances in the cell. Intracellular water consists of ions (ion) K, Mg, PO, SO and protein. 2. Extracellular fluid (ECF) is approximately 22% of body weight, maintains the normal cellular environment . Extracellular fluid contains Na, CI, HCO ions as mostly

THANK YOU

someone@example.com

Lecturer Dr. Nathayu

Wantayakul College of Innovation and Manag

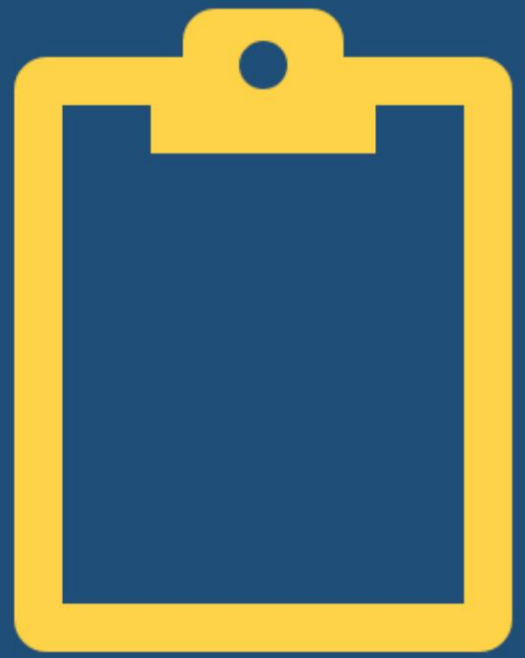
Obligations of the work fsick with injury from the La

for the patient recover from injury as soon as possible and be

able go away bible to Hem Onde m by n

The importance of advice, advice, prevention n

Injury



this a

installation The goal of the study

Setting goals for treatment must take into account the age and gender of the athlete. type and type of sports injuries The level of sport whether it is competitive or recreational. Amateur or professional sports

Basic Goals of Patient Rehabilitation for sports injuries

1. Reduce pain and inflammation

2. Prevent recurrence 3. Fix

problems that cause injury such as lack of flexibility of ligaments and soft tissue Muscle imbalance Loss of sensory nerves of the joints (proprioceptive senses) 4. Provide advice about the maintenance program 5. Provide

patients or athletes with self-care methods 6. Allow patients to return to sports or compete as before suitable duration

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research, Sendi; Medicine of repair, Aye Long injury

(Pathophysiology of Tissue Healing after Injury)

in patient rehabilitation with sports injuries, you need to know

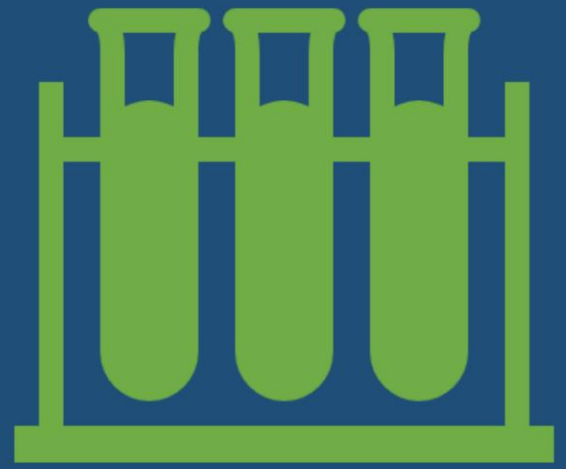
b This stage of the repair process of the back tissue damage a

body in order to arrange a treatment program for the patient correctly, allowing the

a without complications and fears. be divided into 3 The

patient to recover quickly and be able to play sports as usual. The repair process can

phases are - Inflammation phase - Repair phase - Adjustment phase



1. Inflammation phase (Inflammatory phase) will occur within the first week after injury. Symptoms of tissue inflammation, pain, swelling, redness and heat after tissue injury. Some chemicals are secreted in response to inflammation, such as histamine, anaphylatoxins, bradykinin, prostag landins, causing blood vessels to dilate. And there is a change in the permeability of the vascular wall, causing plasma to seep out, resulting in swelling of the tissue in that area. If there is a tear in the blood vessels as well The more swelling, inflammation will increase. In addition, chemotactic factors will cause cell migration. Various white blood cells come to the area that is more inflamed and releases various enzymes to help accelerate the degradation of dead tissue.

2. The repair phase (Reparative phase) will occur in 1-3 weeks, where fibroblasts will create new collagen tissue to repair the dead tissue . If the movement is appropriate to cause stress. Tissue following Wolff's law will make collagen tissue better aligned, reduce scarring and fibrous tissue, resulting in the production of elastin tissue, which plays an important role in strength and strength. The flexibility of the tissues makes it resistant to stress well. But if there is no movement left in Prolonged idle state affects tissue repair and healing. Lack of elastin tissue production, resulting in strength and durability reduced stress and may cause stiff joints (contracture) followed, which hindered the rehabilitation and Patient's return to sports

to have movement from the beginning It increases the production of collagen and elastin tissue. It increases the strength of soft tissues, ligaments and ligaments around the joints, enabling faster recovery of patients.

3. Remodeling phase takes 3 weeks to 6 months depending on the tissue, may take up to 1 year, especially bone tissue. to order the arrangement of tissue components such as collagen, trabecullar bone. Limitation of movement at this stage may cause
fascia and adhesive joints

Continuous recovery by exercising the muscles involved. and training necessary skills respectively. The strength and readiness of different tissues will help the patient to He recovered and returned to playing sports normally with minimal injury.

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while playing Lai heals injuries from

u u

1. Reduce pain, reduce inflammation by using PRICE (Protection, Rest, Ice, Compression, Elevation) or Cold-Press-Lift principles to prevent further escalation of the injury in the early stages. The injury heals faster and does not cause complications such as fascia around the joints, incomplete healing, risk of injury water easily in some cases If it is necessary to use medication such as painkillers, non-steroidal anti-inflammatory drugs (NSAIDs), physical therapy tools should be considered when indicated, such as ultrasound, electrical stimulation. Pain reduction (Transcutaneous electrical nerve stimulation, TENS) Some may consider topical steroid injections for chronic injuries that have been performed. other treatment methods are ineffective But be careful with the prohibition. and caution in patients with each

2. Increase the range of motion of the joints to return to normal and increase the flexibility of tendons and soft tissues Before going to a program that builds strength, strength and endurance of the muscles, problems with limited joint movement It may be caused by muscle spasms, joint contracture, or lumps or calcifications that interfere with joint movement. (intraarticular blockade) or from pain Treatment depends on what causes it. And provide treatment according to the cause, along with passive, active-assistive, or active ROM exercise, which may feel tight or slightly painful while doing it.

3. Increase muscle strength and endurance Before training muscle strength, range Movement should be at least 75-80% of normal and then practice using the PRE (Progressive resistive exercises) principle.

4. Develop skills and abilities of patients suitable for that type of sport, such as coordination training, speed training Each type of sport requires different basic skills such as flexibility, strength, power, muscular endurance, lung and heart performance, etc.

5. Increase work efficiency Cardiopulmonary function was assessed using aerobic exercises if there was no disturbance to the healing of the injured tissue.

6. Recommended maintenance program, including stretching, aerobic and strengthening exercise, etc.

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Criteria for turning back to play Bird Lakshmi Lak

(Return-to-play criteria)

1. Full range of motion 2.

Normal strength 3. Normal

neurological examination 4. No
detectable inflammation or swelling

5. No joint instability problem

6. Able to move and run without pain or

anti-inflammatory drugs. 8. Receive advice on care and

prevention of injuries that may occur later, such as warming up.
stretching, strength training and muscle strength, selection of
heat and cold for treatment, taping and bracing for injury
prevention Learning to notice the pain, swelling that occurs.
while playing sports or after playing sports

Remember…

Safety First!

The psychology of e-sports

Lecturer Dr. Nathayu Wantayakul

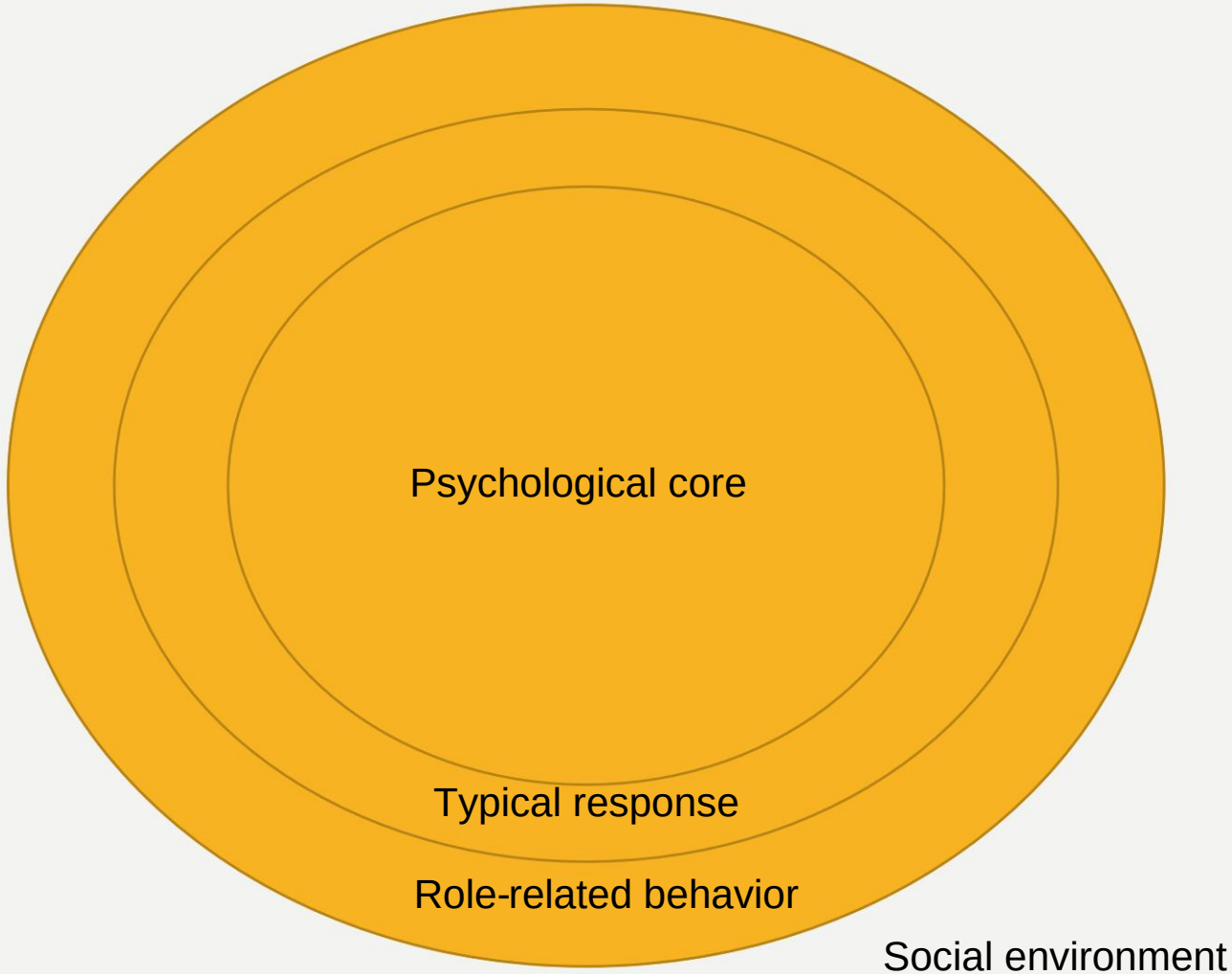
esports sports psychology

The science of applying psychological principles to sports with the aim of improving the performance of athletes, but in reality the goal of Psychologists are not alone. Dominating oneself or living in an environment or in happy status And feeling proud of being "yourself" is another role that sports psychologists should play, because winning alone is not the goal of the sport. It has always been an important aspect of life. Helping people to be interested in sports, turn to sports. and playing continuously and consistently may result He wants to be an athlete too. when you want to be Athletes, sports psychologists can help them. achieve objectives, such as helping athletes feel more self-confident, suggesting ways to control themselves when Faced with stressful or dissatisfying situations for the effect of controlling one's consciousness and emotions to the development of sports skills . Compete more without aiming for only win-lose results.

Sports psychology involves many individuals: athletes, coaches, coaches, parents, close associates, spectators, media, even competitors. Sports psychologists must It works with many people to achieve their goals, especially helping athletes perform their sports or compete to their fullest potential. steps and processes sports psychology for this purpose It takes time and cooperation to perform continuously. consistent throughout the life of Be an athlete and involved in sports. Like sports training, it is voluntary, self-aware and self-learning. It is a social and psychological process. concepts, theories and processes in psychology related to sports, including personality, learning, attitude, impulse, willpower, motivation, stress and anxiety. Society and environment Confidence Violence or aggression Excitement Sports behavior Problem-solving techniques Measurement and assessment Self-analysis All have influence on all athletes.

personality and athlete

Hollander's Personality Structure (1971) modified to use sports psychology by Martens (1975).



personality theory

1. Psychoanalytic theory (Psychoanalytic Theory) of Sigmund Freud (1933) believes that human behavior is caused by hidden sex drives.

- Id
- Ego
-Super Ego
    - conscience
    - Ego Ideal

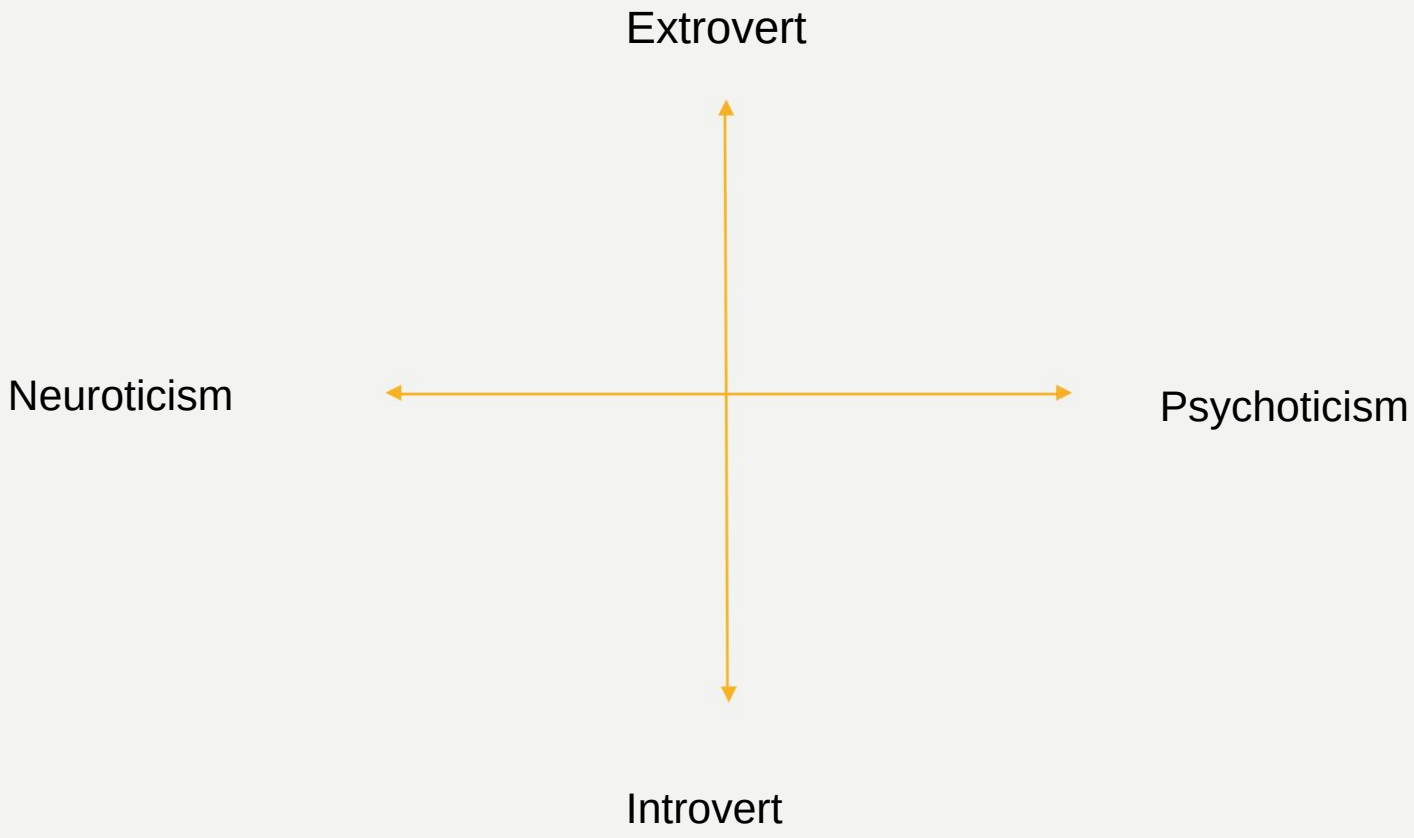
2. Carl Gustav Jung's psychoanalytic theory believed that human behavior developed from growth and social motivation

- Introvert
-Extrovert _

3. Bandura's Social Cognitive Theory believes that behavior arises from learning to respond to stimuli. Which is obtained from observing and imitating the behavior of others and helps to affect permanent actions with social reinforcement (Modeling and Social reinforcement) has the following processes: 3.1 Attention 3.2 Retention (Retention) 3.3 Practice (Motor Reproduction) 3.4 Reinforcement (Reinforcement)

4. Trait Theory

4.1 Eysenck's Model (1968)



4.2 Cattell's Behavior Model (Cattell 16 PF) (1965)

R= f (S. P)

R = Response

S = Situations

P = Personality

5. Behavioral Theory (Behaviorism)

5.1 Thorndike's Shaping of Behavior Theory believes that reinforcement is the motivator for behavior (Operant Reinforcement Theory).

-Positive Reinforcement

-- Negative Reinforcement

5.2 Behavior arises from Rotter's response to stimuli. It is believed that a combination of genetics and experience , learning, reinforcement, anticipation, and template help. Motivation or increasing stimuli In order to have a good response or good learning S - R - RF Response (R)

Stimulus (S)

Reinforcement (RF)

6. Antisocial Theory Lewin's Interactionism believed that personality and behavior were

The result of the interaction between the physical and mental characteristics of a person. with the individual environment and surrounding circumstances

B = f (P x E)

B = Behavior

P = Personality

E = Environment

7. Sheldon and Stevens's Somatotype believed that physical components and personality Be able to describe specific personality traits of a person.

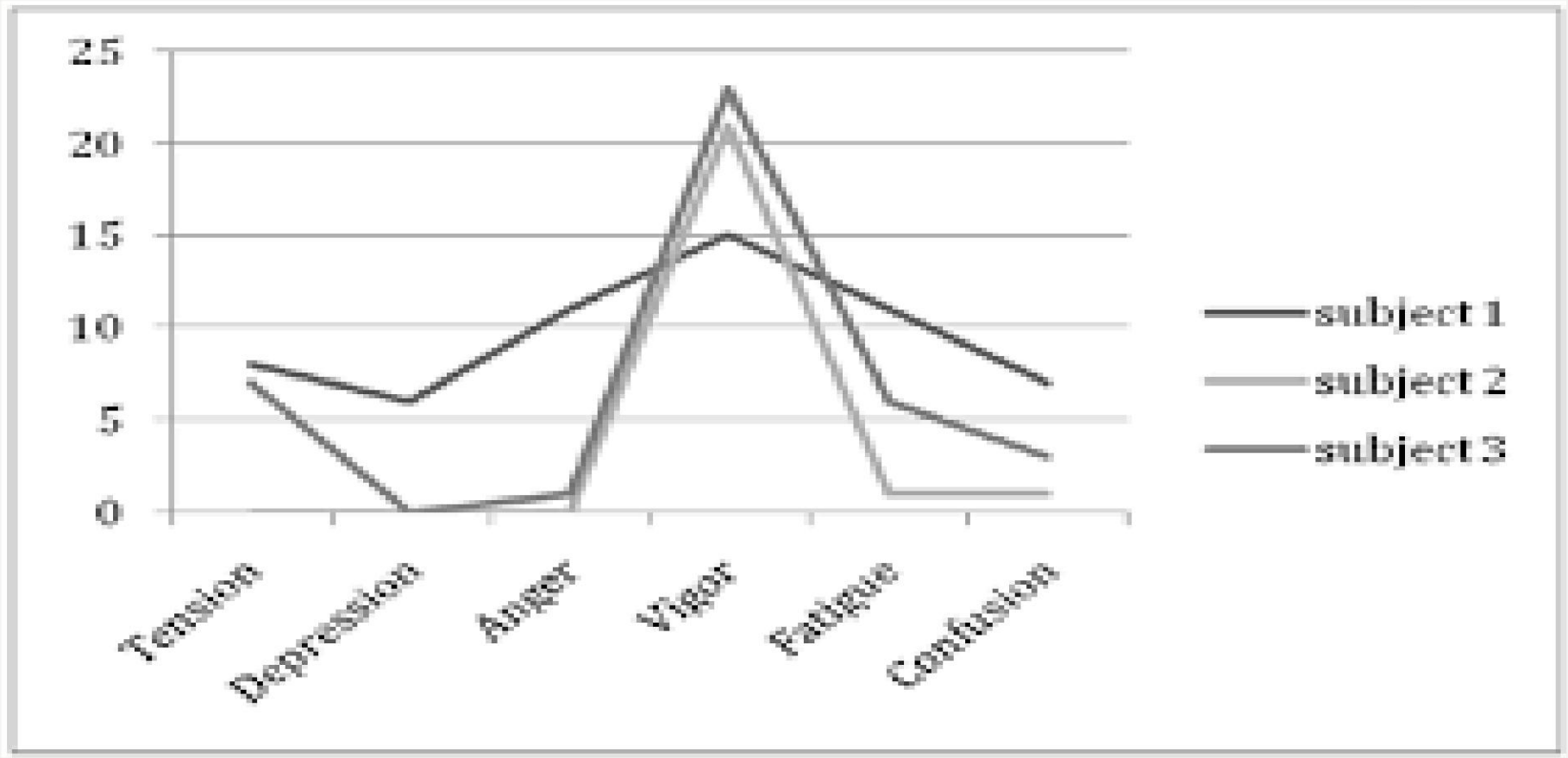
7. 1 Endomorphy 7. 2

Ectomorphy 7. 3

Mesomorphy

8. Morgan's Iceberg Profile (1979)

POM (Profile of Mood State) test



Arousal Anxiety and Stress: Impulses are neutral and have no effect

on behavior but when combined with thoughts, emotions and assessment. Situation will cause both positive and negative impulses to behaviour.

theory about the on the importance the Nathof force bird on athletic ability

1. Drive Theory (Drive Theory) of Hull (1943) believed that behavior stems from a person's character and internal drives or internal impulse

$$B = D \times H$$

B = Behavior

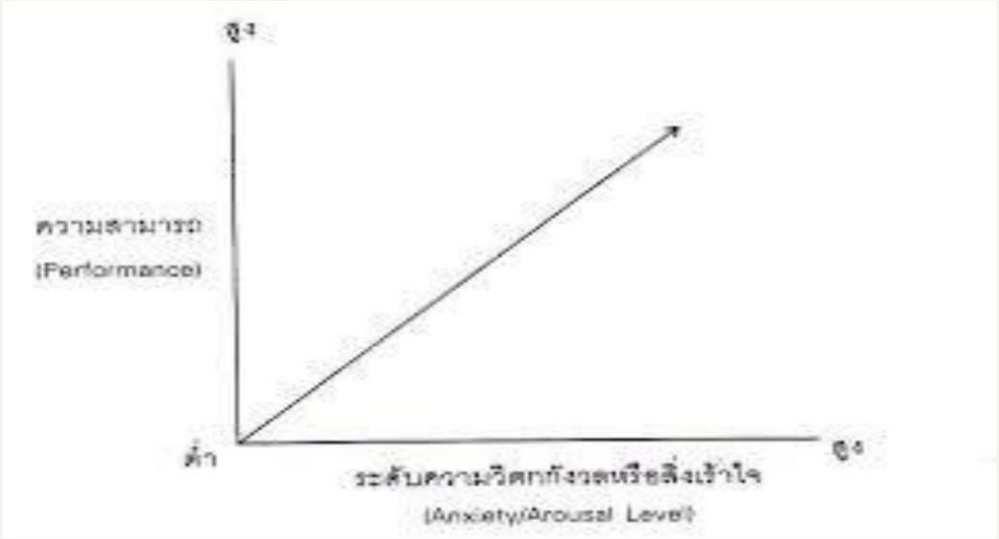
D = Drive

H = Habit Strength

and believes that athletic abilities arise from actions impulse level per skill level

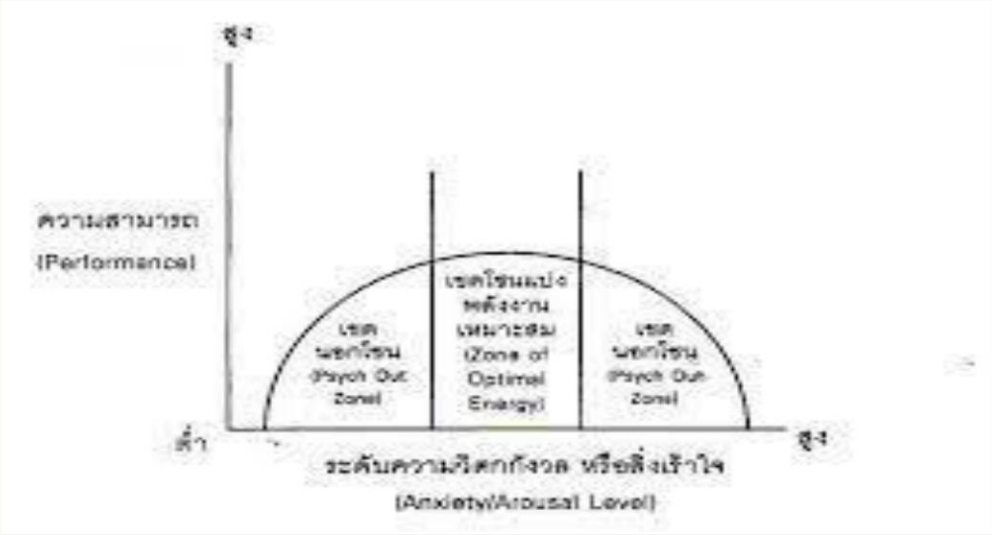
and believes that athletic abilities arise from actions impulse level per skill level

P = Arousal x Skill level



2. The Inverted - U theory of Yeres and Dodson (1908) believed that athletes perform their best in sports. when there is enough stimulus If the impulse is not high enough or too high, the ability will

reduce



3. The Zone of Optimal Functioning (ZOF) theory of Hanin (1986) believes that each type of athlete has different levels of impulse needs. in order to show the ability in sports to the maximum

4. The Catastrophy Model theory of Fazey and Hardy (1988) believes that high impulses

Exceeding the athlete's fitness can result in a rapid decline in athletic ability.

kind of anxiety

1. Trait Anxiety 2. State Anxiety

type of anxiety

1. Cognitive Anxiety 2. Somatic Anxiety

stress management techniques

1. Relaxation Techniques to reduce the level of stimuli that affect athletes.

    1.1 Feedback Biofeedback 1.2

    Edmond Jacobson's Progressive Muscle Relaxation 1.3 Johannes Schultz's

    Autogenic Training 1.4 Meditation 1.5 Hypnosis

2. Cognitive Behavioral Techniques to build self-confidence and reduce

Mental anxiety otni vozne S

2.1 Goal Setting, Locke and Latham, 1985 2.2

Self-Talk 2.3 Pep Talk

3. Imagery Techniques for stress relief by focusing on specific skills.

3.1 Imagery 3.2

Mental Rehearsal

THANK YOU

Goal #1

- Goal #2

Goal #3