

FNP

1-Three phases are mainly differentiated: a first stretch, followed by an isometric contraction of the stretched muscle, and ending with a new stretch. Remember that an isometric contraction is a contraction but we don't move the muscle, we only force the muscle and our classmate does not leave us.



Fnp quadriceps:

- 1-First you have to push your classmate leg like in the photo (20 second)
- 2-Then he has to do a contraction (8 second)
- 3- They have to relax the leg (5 second)
- 4- We do the same that in the 1 step (20 seconds)

Fnp hamstrings:

- 1-First you have to push your classmate leg like in the photo (20 second)
- 2-Then he has to do a contraction (8 second)
- 3- They have to relax the leg (5 second)
- 4- We do the same that in the 1 step



General adaptation syndrome stages

1. Alarm reaction stage

The alarm reaction stage refers to the initial symptoms the body experiences when under stress. You may be familiar with the “fight-or-flight” response, which is a physiological response to stress. This natural reaction prepares you to either flee or protect yourself in dangerous situations. Your heart rate increases, your adrenal gland releases cortisol (a stress hormone), and you receive a boost of adrenaline, which increases energy. This fight-or-flight response occurs in the alarm reaction stage.

2. Resistance stage

After the initial shock of a stressful event and having a fight-or-flight response, the body begins to repair itself. It releases a lower amount of cortisol, and your heart rate and blood pressure begin to normalize. Although your body enters

this recovery phase, it remains on high alert for a while. If you overcome stress and the situation is no longer an issue, your body continues to repair itself until your hormone levels, heart rate, and blood pressure reach a pre-stress state.

Your body continues to secrete the stress hormone and your blood pressure remains elevated. You may think you're managing stress well, but your body's physical response tells a different story. If the resistance stage continues for too long of a period without pauses to offset the effects of stress, this can lead to the exhaustion stage.

Signs of the resistance stage include:

- irritability
- frustration
- poor concentration

3. Exhaustion stage

This stage is the result of prolonged or chronic stress. Struggling with stress for long periods can drain your physical, emotional, and mental resources to the point where your body no longer has strength to fight stress. You may give up or feel your situation is hopeless. Signs of exhaustion include:

- fatigue
- burnout
- depression
- anxiety
- The physical effects of this stage also weaken your immune system and put you at risk for stress-related illnesses.

3-Definition of threshold: a point of beginning : a minimum requirement for further action specifically : a determination (as of fact or the existence of a reasonable doubt) upon which something else (as further consideration or a right of action) hinges the threshold for inquiry.

4-Training load is textual feedback on the strenuousness of a single training session. Training load calculation is based on the consumption of critical energy sources (carbohydrates and proteins) during exercise.

The Training Load feature makes the loads of different types of training sessions comparable with each other. For example, you can compare the load of a long low intensity cycling session to that of a short high intensity running session. To enable a more accurate comparison between sessions, we have converted your training load into an approximate recovery need estimation.

5-Principles for Learning Concept Classification

Oliver establishes the following categories to classify the different principles:

- Principles related to the stimulation of physical conditioning.

This says that the training stimulus must overcome a certain threshold of intensity to be able to initiate an adaptive reaction, to have an effect in the training.

- Principles related to the systems to which said stimulus is directed.

A stimulus is any change that is capable of producing a response from the organism. The receptors are very specialized structures capable of perceiving the stimuli and converting them into nervous impulses. There are two groups. Internal and external.

- Principles related to the response to said stimulus.

The stimuli respond to reactions of the environment or their own, and are subject to the nature of the action that precede it becoming a situational chain in which the process is repeated, being: A stimulus that precedes a perception and this causes an action, where the cycle returns and repeats itself because the action is the stimulus that precedes another perception that originates another action.

Zintl encompasses its proposed principles in three groups:

- Those who initiate the adaptation.

The adaptation to physical effort in the development of basic physical abilities. Following the definition of Alvarez del villar, the

adaptation is the ability of living beings to maintain a constant balance of their functions before the stimuli that affect them.

- Those that guarantee adaptation.

In a complete macrocycle, we will have mesocycles or microcycles in which we need to perform very strong stimuli, but we must know how to control stages and guide our training correctly based on our objectives. I repeat we can't always train heavy, since, our central nervous system would not support it, and our muscles either.