# Injury Prevention: **Principle of F.I.T.T.**

### **BACK TO TRAINING**

While moving every day is ideal, it is important to build up to it gradually with training. It is better to start smaller and progress faster than to start large and increase your risk of injury and overtraining. In the CAF, the number one cause of non-deployment is injury related. Training is one of the best ways to decrease this risk but is also the cause of many of these injuries. Most of them were preventable by a more structured progression. Knowing your F.I.T.T. is one of the ways to prevent these injuries and to progress in an optimal way.



# **FREQUENCY**

The frequency of training is the number of sessions performed per week. It is recommended to do 2 to 4 training sessions per week when returning to physical activity. They must be well distributed and varied during the week to create an adaptation of the body and respect the recovery time which varies from a few hours to a few days depending on the duration and intensity of the effort made.



## **INTENSITY**

The intensity of a physical activity can be measured in several ways. The 2 most common are the effort perception scale (EPE) (subjective) and heart rate (objective). Everyone's perception of intensity is different depending on their current physical condition. When restarting training, we want to start with a moderate intensity (PES: 12-16/20, HR 120-160 BPM) and gradually increase it towards its goal. The intensity can be modulated by changing the loads, the number of reps and sets, the time of effort, the training techniques and the speed of execution.



### **TIME**

When returning to training, time is often associated with the total duration of the physical activity session. It must last at least 10 minutes to have benefits on the cardiorespiratory system. When returning to training, the time of effort varies according to the length of time not trained, our experience and our current physical condition. A 20 min. to 1 hour workout is ideal. This allows time for a warm-up and cool-down.



### **TYPE**

The type is the physical activity practised. For example, weight training, a sport, running and yoga. You should choose a physical activity that is motivating and that you can practise consistently, as well as one that is specific to your goals. Certain types of training are to be favoured when you start again, such as muscular endurance (10 reps or more) and cardiorespiratory training (cycling, running-walking, elliptical, etc.) or a combination of the two (muscular-cardio circuits). However, strength and power sessions are not recommended due to the intensity and the risk of injury.



#### **OPTIMAL PROGRESS**

To progress and reduce your risk of injury, you should increase only 1 element of your F.I.T.T. at a time and for a maximum of 10% per week.





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### SUPERIOR LEVEL

In the CAF, the number one cause of non-deployment is injury. Training is one of the best ways to reduce this risk but is also the cause of many of these injuries. Most of them can be avoided by a more structured progression. Knowing your F.I.T.T. is one of the ways to prevent these injuries and make optimal progress. Reaching a training plateau is often disappointing and it is often at these moments that injuries occur because we wanted to progress too quickly.



# **FREQUENCY**

The frequency of training is the number of sessions per week. There is no maximum amount of training sessions, but you must respect the body's recovery time. You need at least one rest day in a week. It can also refer to the number of times you work a muscle group or a type of training in your week. We need to spread them out and vary our workouts to get the most out of them.



### **INTENSITY**

The intensity of a physical activity can be measured in several ways. The 2 most common are the effort perception scale (subjective) and heart rate (objective). Everyone's perception of intensity varies according to their current physical condition. The key to optimal progress lies in intensity. You must take the time to plan your progression and ensure that it is adapted to your goal. Intensity can be increased by modifying loads, the number of repetitions and sets, effort time, training techniques, execution speed and many other factors.



### TIME

Time is often associated with total session time. A person with good training experience needs to look at the time with a different approach. In strength training, we can talk about time under tension, work/rest ratio and rest time between sets. In cardiorespiratory training, there is time at a % of MAP and also the work/rest ratio. The variation of time will often be modified by the parameters that we will determine with the intensity. It is also important not to neglect your warm-up time in your training session. A quality warm-up will decrease the risk of injury and increase the performance of your training.



### **TYPE**

The type is the physical activity practiced. For example, weight training, a sport, running and yoga. Varying the type of physical activity will allow you to develop several components of physical fitness and thus improve your overall physical condition. You must take the time to plan your training year to get the maximum progress by varying the types of physical activity, but also on a weekly basis. Like alternating high and low-impact days in cardiorespiratory endurance.



#### **OPTIMAL PROGRESS**

To progress and reduce your risk of injury, you must either increase only one element of your F.I.T.T. at a time or know your training load (total load lifted in your training, total km covered in the week, etc.) and modify several elements. However, the increase in your F.I.T.T. should not be more than 10% per week.



