

FIT TO FIGHT: PHYSICAL FITNESS TRAINING PROGRAMS FOR THE CANADIAN FORCES

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INTRODUCTION

Canadian Forces (CF) members must be physically fit to meet military operational requirements, to perform under a wide range of geographical and environmental conditions, to cope with the stresses of sustained operations, and be ready to respond on short notice. Thus, physical fitness training forms an important part of the CF physical education programme. All members of the CF are expected to achieve and maintain levels of physical fitness which will enable them to perform their normal duties with maximum efficiency; keep them prepared to meet any emergency that may require them to perform effectively under adverse conditions for a prolonged period of time; and contribute to the maintenance of their health. The necessary high levels of physical fitness required by Canadian Forces members can only be achieved through physical fitness training programs.

RESEARCH AND DEVELOPMENT OF PHYSICAL FITNESS PROGRAMS

Physical fitness training programs in the CF are developed based upon the results of task and physical demand analyses conducted during the research and development of operationally relevant physical fitness standards. During task analyses, the following measurements are taken: (i) weights of all equipment used on the job; (ii) heights equipment is lifted; (iii) distances equipment is moved; (iv) time required to complete all tasks; and (v) weight of gear worn by military personnel. During physical demand analyses, the physiological responses (heart rate, energy expenditure, oxygen uptake) and the perceived exertion of military personnel while they are performing their job tasks are documented. This information is then utilized to form the basis (frequency, intensity, type and time) of physical fitness training programs. This process ensures a scientific linkage between physical fitness standards and supporting physical fitness training programs.

LEVELS OF CF PHYSICAL FITNESS PROGRAMS

There are three levels of physical fitness programs in the CF: (i) General; (ii) Environmental, and (iii) Occupation specific. General physical fitness programs ensure that all CF members are provided with an exercise prescription tailored to their individual needs and fitness test results. Environmental and Occupation specific physical fitness programs ensure that Navy, Army, and Air Force personnel, as well as members of specialized Occupations or Units, such as Fire Fighters and Special Operations Forces, are provided with operationally relevant physical fitness training. Within each of these different levels of programming, there are physical, functional, and operational training modalities. Physical training modalities include individual and collective programs comprised of traditional training methods such as running, cycling, swimming, circuit training etcetera. Functional training is comprised of multi-joint movements that are reflective of movements on the job, and can be conducted in traditional gymnasias or fitness facilities and in austere conditions. Operational physical

fitness training is comprised of tasks that are performed on the job, and is typically performed in the gear worn by military personnel

GENERAL PHYSICAL FITNESS PROGRAMS

Canadian Forces Exercise Prescription (CF EXPRES) Program

It is a mandatory military requirement that members participate in the Canadian Forces Exercise Prescription (CF EXPRES) Program, which is comprised of a preliminary medical screen, a physical fitness evaluation, an exercise prescription tailored to the individual's needs, the development of the necessary skills and knowledge to enable the member to participate effectively in the prescribed physical fitness programs, and regular participation in physical fitness activities in which the member can monitor and control frequency, duration, intensity and rate of progression. Guidelines for safe and progressive physical fitness training are detailed in CF EXPRES Program Guides. CF EXPRES Program Guides have been developed for muscular strength and endurance, walking, stationary cycling, swimming, rope skipping, cycling, jogging, cross-country skiing, skating, and snow-shoeing, and are provided to CF members upon completion of the evaluation portion of the program.

Soldier On Program

The CF is committed to helping ill and injured members. The CF Soldier On Program was formalized in 2007 to contribute to optimizing the functional independence of CF personnel with a physical or psychological disability by delivering services that support their full and active participation in physical activity, recreation or sports. The Soldier On program provides the resources and opportunities for ill and injured military personnel to fully and actively participate in physical fitness, health and sports activities. The program is also aimed at accentuating the potential and value of injured/ill CF personnel rather than their disability.

Pregnancy and Exercise

While the CF has developed a number of excellent fitness programs, none of them were designed to accommodate the special needs of the active pregnant woman. To this end, a fitness maintenance program specifically for pregnant women was designed with the health of safety of the CF member and her baby in mind. The *Guide to Fitness: During and After Pregnancy in the CF* (Wolski & Wenger 2003) is a resource available to CF women to assist them in maintaining some of their fitness levels during pregnancy.

ENVIRONMENTAL PHYSICAL FITNESS PROGRAMS

Army Physical Fitness Programs

The *Army Fitness Manual* (Wenger, 2005) is a 12-week Army Fitness Program designed to assist soldiers in achieving the levels of fitness required to complete the Army Fitness Standard. This program is a balanced and progressive, and is designed to develop all fitness components. In addition to the 12-week program, the *Army Fitness Manual* contained specialty training programs such as an eight-week Garrison program, a six-week rapid deployment program, a three-week rapid deployment program, and a four-week field training program.

Combat Fitness Program

Combat fitness conditioning encompasses special exercises designed to keep the trained soldier in top physical condition, which is one of the components of total readiness for service in field units and in a theatre of operations. The *Combat Fitness Program* (CFP) provides a more functional and intense physical fitness program option for CF personnel, and may best be described as a progression from the standardized *Army Fitness Manual*. The CFP derived its origins from many different training methods, and the program workouts are comprised of metabolic conditioning, gymnastic and body weight exercises, and weightlifting, power-lifting, and Olympic lifting training modalities.

Force Generation Fitness Programs

To complement existing physical fitness programs, a new physical fitness program for the Navy, Air Force and Army environments is being developed in conjunction with the Environment-specific fitness standards as part of the CF Health and Fitness strategy. This program is based on the Force Generation Cycle of deployment, regeneration, individual training, collective training, and pre-deployment training. During the Force Generation Cycle, physical, functional, and operational training modalities are periodized. Specifically, during the regeneration phase of the Force Generation Cycle, this tactical athlete program is geared toward Physical training modalities. As a member moves through the Force Generation Cycle, functional and operational training modalities are incorporated, and during the pre-deployment phase of the Force Generation Cycle, functional and operational training become the primary training modalities.

OCCUPATION AND SPECIALTY SPECIFIC PROGRAMS

There is a number of physically demanding CF occupations or specialties that have researched physical fitness standards that exceed the minimum CF requirements for physical fitness. To assist members of these physically demanding occupations and/or specialties to achieve the requisite levels of fitness for the safe, effective and efficient performance of their job, specialized fitness programs have been developed.

CF Fire Fighters

Fire fighting is universally recognized as one of the most hazardous and physically demanding occupations. To ensure that all CF fire fighters have an adequate level of physical fitness, the Fire Fighter Physical Fitness Maintenance Program was introduced. This program is comprised of a task-based evaluation, a supporting fitness program, and educational resource materials. *Fighting Fire with Fitness* is a 12-week performance related fitness training program designed to assist CF fire fighters in achieving or exceeding the fitness levels required for the performance of professional fire fighter duties.

Special Operations Forces

Joint Task Force Two (JTF 2) is the CF Special Operations Forces (SOF) Unit responsible for counter-terrorism operations. The physical demands of Special Operations require that members have excellent levels of physical fitness and an uncommonly high degree of determination to overcome physical and mental challenges. The JTF 2 Pre-Selection Physical Fitness Training Program (Jaenen,

Wenger, Lee, Couturier & Salmon, 2004) is a strenuous 12-week program designed to bring SOF applicants to an elite level of fitness that is commensurate with the levels of fitness required for completion of the rigorous selection and training processes. Due to the strenuous nature of this fitness training program, personnel undertaking this program are strongly encouraged to first complete the training outlined in the Army Fitness Manual.

Core Training Manual for Deployed Operations

Core strength training is an important component of CF SOF physical fitness training. The Core Training Manual for Deployed Operations was developed to provide SOF members with a program for maintaining core strength while deployed. The program is designed to be completed in austere conditions with little or no equipment.

CONCLUSION

Whether in peace or at war, members of the CF are expected to maintain a constant state of readiness in order to respond to any emergency situation which might arise and which would require them to perform effectively for prolonged periods of time under considerable physical and mental stress. The CF benefits significantly from a wide range of physical fitness programs that assist members in maintaining operational readiness.

REFERENCES

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