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HUMAN RESOURCES IMPLIED IN SPORTS COMPETITIONS ORGANISING AND DEVELOPMENT

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ABSTRACT. A competition/sports event should develop according to careful and detailed preparations. The complexity and extent of organising an event and its social impact implies an interdisciplinary support for the competition. The main actors – the participants – are all those individuals who, starting from a variety of convictions, bring their contributions to a competition's preparing, organising and development. No participants involve no organising, no structures, no competition at all.

***Keywords*:** managers, coaches, spectators, arbiters, sports journalists, stakeholders.

REZUMAT. Resursele umane implicate în organizarea şi desfăşurarea competiţiilor sportive. O competiţie, un eveniment sportiv trebuie să se desfăşoare în urma unei atente şi minuţioase pregătiri. Complexitatea şi dimensiunea organizării şi impactului social presupune un suport interdisciplinar pentru competiţie. Actorii principali – participanţii – sunt toţi acei indivizi care, dintr-o varietate de convingeri aduc o contribuţie la pregătirea, organizarea şi desfăşurarea competiţiei. Fără participanţi nu există organizaţie, nici structuri, nici competiţie.

***Cuvinte cheie**:* manager, antrenori, arbitri, jurnalisti.

A competition/sports event should develop according to careful and detailed preparations. The complexity and extent of organising an event and its social impact implies an interdisciplinary support for the competition.

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3 professional categories are distinguished in terms of sports competitions organising and development: [Hoffman, A., 2004]

A. Managers in different governmental and non-governmental sports institutions and organizations: C.O.R. Chairman, Sport Batch Technical Manager, Sports Club Chairman, Sports Federation General Manager, etc;

B. Specialists members of the technical collectives: coaches, sports medical staff, sports counsellor, etc;

C. Supporting staff: arbiters, sports journalists, stakeholders, sports installations and material and equipment manufacturers, spectators, sports grounds administrators etc.

The competition implies "three main actors": [Dragnea, A., 2000:108]

- Sports creators: sportsmen and sports coaches;
- Consumers: people who practice sport as a leisure activity, to maintain and entertain themselves;
- Sports advertisers – ex-professional sportsmen, journalists, sports presenters and managers.

Movement and sports performances, sports training methods, and competition as an essential sports configuration are supported, each by their own theories, ensuring the multidisciplinary feature of sports as a science.

The main actors – the participants – are all those individuals who, starting from a variety of convictions, bring their contributions to a competition's preparing, organising and development. No participants involve no organising, no structures, no competition at all. [Hoffman, A., Competition from an interdisciplinary perspective]

Categories of participants

Sports competitions experiences represent social processes, where personal characteristics and interests of sportsmen, trainers and officials develop within a certain context.

Children under school age, pre-academic and military education students, university students participating in sports activity.

People who practice "sports for everyone" – competition activities included in a national programme, based on physical exercise free practice, in a clean and secure environment, organised or independently, individually or within a group.

Physical Education teachers – managing the sports activity developed with school sports associations.

Specialised teaching staff within academic education

Professional sportsmen are those individuals practicing sports in a systematic and organised way, with memberships to sports clubs and participating in competitions to:

- Obtain victory;
- Self-surpass;
- Establish a record.

Arbiters and sports judges are officials qualified to ensure that regulations are observed by sportsmen, sports coaches, other officials, spectators, during competitions.

Sports coaches develop sportsmen's selection, training and participating in competitions within sports clubs departments or with national and Olympic teams, according to trainers' status, national sports federations' regulations, sports clubs organising and functioning regulations.

According to the Coach' Status par. 16 and 17, a coach has the following rights and obligations:

Coach's rights:

- Benefit of accurate work conditions;
- Be promoted to superior classification categories in terms of professional training, and results obtained;
- Be a part of internal and international specialised organisms, participate in conferences, specialised traineeships;
- Be granted awards, titles, distinctions in accordance to law.

Coach's obligations:

- Perform sportsmen's training and participation in internal and international competitions included in the agenda;

- Perform the selection, initiation, training and perfecting young talents for performance sports;
- Promote the fair-play spirit, fight doping;
- Contribute by specialised works to improvement in coaching theory and methods of the sports branch they are active with.

Coach's competences

The main coach coaches the team for games. They distinguish themselves by training knowledge, contest knowledge, game technique and tactics. The knowledge is put in practice by decisions taken before, during and after the game on *tactics*, training preparation and team strategy and *tactics* in general.

The main coach should be a good evaluator of the training level of the player, the evolution with games and progress achieved by the player.

These evaluation "instruments" can be classified on: [Bucher, 1987]

- Instruments evaluating and predicting the morphofunctional development possibilities of the future player (primary and secondary selection);
- Instruments evaluating the "acquirements" in terms of physical abilities;
- Instruments evaluating the "acquirements" in terms of game capacities (technical, tactical, theoretical);
- Instruments that finally define the performance ability structure (performance behaviour) within a contest.

Second coaches are subordinated to the main coach. Their main duty is to be responsible with some parts of the training or the game:

- Physical training;
- Technical training;
- Individual training;
- Recording trainings, judges' efficiency with games according to well-defined previously established parameters.

The coach's knowledge, attitude and behaviour, and the ability to hide personal emotions and frustrations are likely to influence the sportsman's

performance, but also positive thinking and trust into their own abilities. [Ilies et al., 2005]

As a leader, the coach directs his/her actions towards influencing activity around, in order to reach training and performance goals. In many circumstances, the leader's role is assimilated to the manager's role. The difference between them is that the manager is involved in planning, organising, recruiting, financing and public relations activities. These roles are often assumed by the trainer directly or by delegating responsibilities. [Bompa, 2001]

Coach's abilities: [Muresan, A, 2005]

- The ability to lead is manifested by the way the coach performs the leading attributions;
- Authority is achieved with time;
- Psycho-pedagogical abilities.

Research staff members, developing their activity within pre-academic education units, sports clubs, technical team collectives, the National Institute of Sports Research.

Medical staff develops its activity within sports cabinets and policlinics, sports clubs, technical batch teams, Institute of Sports Medicine.

The doctor's concern is the medical system, with corresponding tasks: ensuring the optimal health condition, acquiring the biopsychological ability for training and contests, recovery after effort and accidents; submitting permanent information to the main coach and the technical manager, offering them a real image of their performance ability, and solutions to solve issues, accordingly. [Colibaba-Evulet & Bota, 1998:76]

Sportsmen are the main actors of sports events. From a competition success to achieving sports performances, all the abovementioned bring their contribution. Behind a professional sportsman there are coaches, a great number of training hours, but also science, technique, sports medicine, administration, all interacting and interdependent.

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ACTUALITIES IN PATIENT HANDLING TECHNIQUES

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ABSTRACT. Proper handling of the patient provides patients and therapists protection, the adequate use of the appropriate auxiliary equipment. Present there is a tendency to minimize the effort of therapist to patient handling equipment used by the auxiliary devices simple or complex electrical or mechanical handling. To reduce to zero the lifting maneuvers of patients by therapists and support staff, patient lifting and transfer are made by mechanical or electrical devices. The equipment used for lifting and transferring comprises a set of straps, belts, belts, slings, hammock with locks or hooks by which they suspend on the arm of the lifting device. Although these auxiliary means the therapist can easily handle, reposition or transfer patients, but still need to use their own strength and knowledge of techniques for handling patients, kinetic techniques to basic and special.

Keywords: kinetic techniques, transfer, mobilizing, maneuvering, position.

REZUMAT. Manevrarea corectă şi în siguranță a pacienților prevede protecția pacientului, a kinetoterapeutului, precum şi folosirea adecvată şi corespunzătoare a echipamentului auxiliar. Actual există tendința de a reduce la minim efortul depus de terapeut în vederea manevrării pacientului prin folosirea echipamentului auxiliar reprezentat de dispozitive simple sau complexe, mecanice sau electrice de manevrare. Pentru reducerea la zero a manevrelor de ridicare a pacienților de către terapeuți şi personalul auxiliar, ridicarea pacienților şi transferul se realizează cu ajutorul dispozitivelor mecanice sau electrice. Echipamentul folosit pentru ridicare şi transfer cuprinde un set de chingi, curele, centuri, hamuri, hamace prevăzute cu închizători sau cârlige cu ajutorul cărora se suspendă de brațul dispozitivului de ridicare. Cu toate aceste mijloace auxiliare kinetoterapeutul poate realiza mai uşor mobilizarea, repoziționarea sau transferul pacienților dar în continuare este nevoie sa utilizeze forța proprie şi sa cunoască tehnicile de manevrare a pacienților, tehnicile kinetice de bază şi cele speciale.

Cuvinte cheie: tehnici kinetice, transfer, mobilizare, manevrare, poziție.

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Handling techniques include ways to mobilize and transport of patients achieved using the therapists force, with or without auxiliary equipment, in order to change position, transfer from one plan to another, and transport patient to perform physical therapy. In the world today there is a tendency to minimize the effort of therapist to patient handling using the auxiliary equipment and simple or complex electrical or mechanical handling devices.

Some medical institutions for care even choose to reduce to zero the maneuvers for lifting the patients by therapists and support staff by establishing the rule of "zero lift" or "no lift policy" lifting and transferring patients using mechanical or electrical devices (3). The equipment used for lifting and transferring comprises a set of straps, belts, belts, slings, hammock with locks or hooks by which they suspend on the arm of the lifting device.

To transfer the patient is used an inflatable mattress, with handles on the side edges which is inserted under the patient and then swollen with air under pressure, then being handled as a stretcher.

To make a correct and safety handling must be taken several measures to provide patient protection. Also the therapist must use adequate and appropriate auxiliary equipment.

The therapist must take into account the following matters relating to their own safety, patient and colleagues of the team:

positioning close to patient

• legs removed as a basis for wider support heels on the ground, the peaks in the direction of action

• bended knees, spinal cord maintained in neutral position

• avoiding movements combined: flexible rotation or extension and rotation

• grab handles auxiliary devices with palm facing up (in supine position)

• in cases (Bariatric patient, device gypsum, etc.) may appeal to the maneuvers in a team of two or more therapists.

The patient should be evaluated, fully informed about what will be done and what will be done where it can cooperate and give his consent. This effect may be used where the patient record should be past results of the assessment techniques used for handling, auxiliary equipment and team members.

Patient assessment before handling shall verify:

• age, weight, height

• disease, and other illnesses coexistence

• mental status: understanding, communication, cooperation

• physical status: independent, partly dependent, dependent

• the existence of aggravating conditions that may affect handling: pain, respiratory disease, cardiovascular, orthostatic hypotension, epilepsy, presence of escarae, injuries, oedemas, amputation, prostheses, orthesis, apparatus Gypsum, blocked joints, advanced osteoporosis, paresis, paralysis, paraesthesia, fragility vascular, obesity, urinary incontinence, colostomy, scars operators, drain tubes.

• appropriate clothing and footwear (shoe pin, etc.).

• verification by inspection and palpation of the areas where they will apply the auxiliary equipment (belts, slings, safety belts)

Devices and auxiliary equipment should be inspected before handling the patient if integral, if it works and should be put into proper position: locked / unlocked, closed / open, on / off, etc.

TECHNIQUES IN KINETOLOGY

1. Kinetologic basic techniques

1. 1. Techniques akinetic

1. 2. Techniques kinetic

1. 3. Transfer techniques

1. Kinetologic basic techniques. Techniques that underlie the completion of a program in kinetotherapy can be classified into two broad categories: techniques akinetic and kinetic techniques.

Akinetic category of techniques are: restraint (for the rest of the content, correction); posture (corrective and facilitation). Category kinetic techniques are: static kinetic techniques (isometric contraction, muscle relaxation), dynamic kinetic techniques: active (reflexive and voluntary) and passive (by tractor assistance under anesthesia, auto-pasive, pasivo-active in handling). In addition to these basic techniques, there are special techniques or

combination of techniques such as stretching techniques, transfer techniques, facilitation techniques neuromuscular.

1. 1. Techniques akinetic

Akinetic techniques have two basic characteristics: the absence of voluntary muscle contractions no movement determined segment.

Restraint

Restraint is characterized by maintaining artificial and fixing, for certain periods of time, in full body or just a segment in a fixed position, with or without the help of installations or devices.

Restraint suspends first, movement joints, as well as dynamic voluntary contraction, but allow isometric contractions of the muscles around those joints.

Restraint may be total, if the lead body, or may be regional segmentation, local, whether involving parts of the body.

Total immobilization is to obtain rest in general: politrauma, extensive burns, diseases, cardio-vascular problems, paralysis, etc.

Property, regional or local segmentation achieved complete immobilization of parts of the body, while retaining freedom of movement of the rest. Depending on the purpose, may be:

- Restraint on the rest - indicated in cranio-cerebral trauma, bone marrow, thoracic, localized inflammatory processes (arthritis, trends, myozitis, burning, phlebitis, etc.) And other processes resulting algic intense mobilization. Restraint is for that segment and is done on the bed, special supports, in scarves, etc. orthezis.

- Content of restraint - lies in maintaining "piece together" the areas of joints or bone fragments, blocking a segment or part of a segment in a system of secure external (device Gypsum, splinter, plastic thermo-malleable, orthezis, corsets etc.). Technique is used for reinforcing fractures, strains, arthritis, etc.

- Immobilization correction is to maintain certain periods of the correct position, of corrective, hipercorective in order to correct deficiencies of attitudes: the deflection joints retractures (genu flexum, etc. recurbatum. paralytic, degenerative, etc.). Deviation of spine in sagital and frontal plane (scoliosis, etc.)

Immobilization correction is performed with the same systems as the content.

The correction of defective items is only on soft tissue (capsule, tendon, muscle, etc.). Only when bone is growing, some types of restraint can influence form. Fixed content and are generally appropriate maneuvers and techniques to be ortopedic-surgical or kinetologic (traction, manipulation, passive movements under anesthesia, etc.).

Posture

Posture corrections are most used in kinetologic treatment or recovery. In many cases it is recommended in preventive disease whose evolution is predictable, causing large failures (eg ankylopoetic spondylitis). Pathology mention some of the problems when posture is a basic technique: chronic inflammatory rheumatism and general arthritis, regardless of etiology, coxarthrozis, lombosacralgia cause chronic mechanical cause paralysis of central or peripheral, deviations of the column or other segments etc.

Posture corrective action is addressed only to the soft, connective tissue which can be influenced. Correcting deviations bone than is possible in children and adolescents growing. Sometimes it is recommended that position (especially the open) to be adopted after a preliminary heating of that area or, to be applied in hot water.

A great interest in functional recovery serial items is to be fixed with orthesis removable as they win the deficiency corrected. It is believed that the night is the best time for job - fixed in various devices, for storage or corrective amplitude of movement gained by kinetotherapy during the day.

From a technical point of view, items can be corrective:

- Free (items correct) or autocorective; They are attitudes imposed to patient and voluntarily adopted by it for correcting progressive joint limitations amplitudes. They are indicated, especially in hypertonia reversible. Postures autocorective weight using a segment or the entire body, achieving posture segmentation, maintained by the weight of a member or a segment thereof.

- Free-aided (by rolls, pillows, straps, etc.) or handmade;

- Fixed (Job exterocorective; instrumental) by means of devices or equipment. They restore joint mobility by using weights (loads): direct

(pouch of sand, rolls, pillows) placed proximal or distal joint of mobilized; indirect applied via the pulley fittings.

1. These calls intensified posture joint, so used mainly for large joints - knees and hip, the other may even be harmful. Maintenance does not exceed 15-20 minutes.

Posture facilitation: Posture induces facilitation effects on internal organs. In order to facilitate a process to disrupt the physiological condition, positioning the body in a certain position can be a valuable treatment.

Posture effect on the cardiovascular system:

- facilitates the movement of venous and lymphatic return to the extremity, and role in the curative or prophylactic oedema of stasis.

- facilitates the movement of the capillary blood pressure and is obtained by maintaining the ends to the gravity. Posture affecting the respiratory system:

- Prevention: preventing the installation of lung disease secondary to decreases in pulmonary ventilation.

- Therapeutic bronchial drainage - favoring removal of bronchial secretion and lobby lung segments affected in case of: chronic bronchitis, lung abscess etc. The combination with thoracic tapotament increase the effectiveness of massage vibrator bronchial drainage.

Posture for biliar drainage

1. 2. Techniques kinetic

Static kinetic technique is characterized by muscle tone without length modification to determine the motion segment.

A. contraction is an isometric muscle contraction in which muscle fiber length remains constant, while the muscle tension reached maximum, by activating all motor units of the respective muscle group. Isometric contraction is performed without moving segments, against a resistance equal to the maximum of the muscle or when working against a weight greater than force the issue, but real estate. In reality, there is a movement negligible, increasing tension between the muscle and the relaxation.

B. muscle relaxation: the blood pressure is achieved when the contraction of muscle decreases. Relaxation can be considered as a mitigation

of the tension of any kind (anger, mental, somatic) by changing the center of attention, concentration or effort.

Relaxation is a process psycho-somatic because it is addressed at both a state of increased muscle tension, and tense psychological state, covering an emotional adjustment tonic-optimal

Muscle relaxation may be:

- Overview - process in relation to mental relaxation
- Local - refers to a muscle group
- Relaxation technique for static kinetic refer to local relaxation.
- Dynamic kinetic techniques are performed with or without muscle contraction - which cut to the top of the difference between assets and techniques liabilities.
- Active Movement: reflex, voluntary
- Mobilize active involvement is characterized by muscle contractions own share what is mobilizing.
- **A.** Movement is made active reflex contraction of muscle reflexes, and uncontrollable unsolicited voluntary patient; movements occur in response to a stimulus sensitive-arcs in the sensory motor reflexes. Reflex contraction may occur in bone marrow and supramedular reflexes.
- **B.** active voluntary movement - this technique is characteristic of voluntary movement, ordered, what is achieved by muscle contraction and energy consumption. Movement in voluntary contraction is isotonic, dynamic muscle length and change in near or remote head insertion
- Objectives by mobilizing voluntary active are: maintaining or increasing the amplitude of movement joints, increase or maintain muscle strength; or neuromuscular development coordination;
- The technical active voluntary mobilization are:
- Mobilization free (pure active) - the movement is executed without any intervention or opposed outdoor facility, in addition, possibly the gravity.
- Active assisted mobilization - the movement is helped by external forces, represented by: gravity, kinetotherapists, the pulley assembly etc. to replace muscle power.
- The movement is called active-passive when the patient initiates active movement, but can not make the whole amplitude, which is why intervention is necessary to help end a movement.

- Passive-term movement active when the patient can not actively initiate movement, but once it is helped in the first part of movement, free running rest amplitude of movement. Use:
- When muscle strength is insufficient to mobilize the segment against gravity;
- - When free movement is active on the directions deviate due to head rotation bone joints or suffering neurological, which disrupt the transmission or motor control;
- Mobilization active resistance - in this case the external force opposes partial own strength.
- Technical mobilize active resistance's main objective is increasing strength and / or muscle strength. Voluntary movement in muscles acting as agonist, antagonist, synergist and drop.
- Agonist muscles are initiating the movement and produce, which is why is called "primary driver".
- Antagonist oppose the motion caused by agonist; have so phrenic role representing brake elastic muscle, which usually occurs before the ligament or bone. Agonist and antagonist muscles acting simultaneously forever, but their role is the opposite:
- When agonists work, their working voltage is equal to the relaxation of antagonistic, which controls the making of uniform and smooth movement by adjusting the speed, amplitude and direction;
- Antagonistic when tension grows, the movement produced by the initial agonist cease.
- Thus, by playing each other, balanced between agonist and antagonist produces a precisely coordinated movement. Agonists and antagonists designate a specific movement, but their action can reverse depending on the muscle considered.
- Isotonic contraction is a contraction dynamics caused by changing the length muscle resulting in movement joints. Throughout the movement, so the contraction is isotonic, the tension of contraction remains the same. Changing the length of muscle can be done in 2 ways: through the head near his, so by shortening (concentric contraction dynamics) and by removing the heads of insertion, thus by Elongation (crank muscle contraction).

- Movement dynamic (isotonic) resistance is the most used type of exercise to increase muscle strength and muscle to obtain hypertrophy. Active resistance movements can be made:
- Domestic voyage or segment of the contraction - when agonists working between the insertion of normal;
- Race external segment or outside of contraction - when agonists working beyond the normal insertion of the segment of contraction for the antagonist.
- Average race when agonists have a medium length, lying half maximum amplitude, for a moving date. Isotonic contraction can be

a. *Concentric* - against agonists resistance external muscle to contract to overcome resistance from abroad are coming and shortens both ends insertion, and the bone segments on which to act. This kind of contraction shortens the muscle developed tone and strength. Concentric contractions are running in:

- The segment of contraction, when the movement is started from scratch or from different anatomic joint angles positive effect takes place in physiological (muscle shortens is managing to overcome resistance) and stops at amplitudes greater than or at the end of the race.
- Outside the segment of contraction, when the movement initiated from different angles of joint movement opposing called negative angles, is performed in physiological effect and stop the negative angles smaller joints or anatomic point zero.

b. *Crank* - is performed when agonists, although the contract is defeated by external resistance. Crank contraction is achieved when the muscle is contracted and shortened gradually give a force that stretches it and I remove both ends of insertion, and the bone segments on which the working muscle, respectively. Action they develop muscle strength and elasticity. Eccentric contractions are carried out:

- The segment of contraction, when the movement initiated from different angles positive place in the opposite physiological (resistance overcome external muscles, which gradually stretches) and stops at angles smaller joints or anatomic zero in point.

- Outside the segment of contraction, when the movement, started from scratch in various anatomic or negative angles, is performed in the opposite physiological and stops at more negative angles.

c. *Pliometric* - muscle heads is removed, after which it approaches in a very short time. Pliometry request involves a muscle first phase by a crank, leaving then held concentric phase in what follows naturally. In contractions pliometric using what physiology name "cycle stretch - shortening" ("the gadfly-shortening cycle). Pliometric contraction can be considered as made up of 3 elements:

- Phase crank;
- A brief moment isometrical;
- Concentric phase.
- Pliometric contraction is the most common form of contraction in sports, is involved in the lift, run, push-ups etc. Contraction izokinetic contraction is dynamic, the movement speed is adjusted in such a way that the resistance movement is applied against the force applied to every moment of the magnitude of moves. To correct izokinezic resistance must vary depending on the length of muscles, to require the same force. This is done with special devices called dynamometer. Variations technical realization of active movement against resistance are: resistance by pulley with weights / large segments of upper and lower states, through resistance weights (method of increasing muscle strength is Lorme) resistance by springs or elastic materials (sports gymnastics) Resistance through pliable materials eg clay, putty - used in the recovery of the hand and fingers, water resistance, resistance to kinetotherapists achieved; Resistance executed by the patient - with the healthy member or using their own body weight. Passive movement is made with an external force, the subject fails to muscular work. Mobilization is passive kinetologic therapeutic use and recovery. Technical means of realization of passive movement:

A. traction - is the extent of the soft parts of the locomotive, made in the axis segment or joint, may be executed manually or by various facilities. Continuous traction (continuous extensions) runs facilities with counter, springs, pulley, inclined plane, etc. Are used mainly in orthopedic services for realignment fractured bone or joint head movements, and recovery services for research and blocked joints deviate in flex, etc. extension.

Increased intraarticular pressure is generating pain. Installing a continuous traction reduces pain, muscle stretching. Traction is applied either by pin or by adhesive tapes on skin or through the drop corsets, sleeves, boots etc. These latter modes are the usual methods in medical rescue services. Discontinuous traction can run with both hands - by kinetotherapists, and with the help of plants, just as continuous. Indicate in the joints redori not reach anatomical position; joints with painful muscle; discopaties - vertebral traction; inflammatory processes in joints - traction is achieved with moderate force. Traction - fixing alternate is more a variation on technique posture exteroceptive, but maintained for longer periods. Technique resembles orthezis with progressive correction for the deviation caused by scar retraction redori or joints from retractured soft tissue Traction does not run in ax, but obliquely, in the segments adjacent joint.

B. Forced Mobilization under anesthesia is a technique usually performed by orthopedic specialist. General anesthesia by making good resolutions muscle, which allows, without opposition, forcing joints with breaking adherents. This technical runs in successive stages, with an interval of several days, each step being followed by a fixation splint gypsum to maintain the level of amplitude won

C. Pure assisted passive mobilization is the most common technique performed by the passive mobilization kinetotherapists hands, while the patient voluntarily relax his muscles. Kinetotherapist initiate, conduct and conclude the movement with pressure or tension slow but insistent to get to the actual mobility. Passive movements of tensions usually reach final amplitudes greater than active movements. In carrying out this technique should consider the following:

a) The patient is so important to allow comfort and relax to, and for the best possible approach to the mobilized segment. The patient is positioned in dorsal position, ventral position or settled. Therapist position changes based on the joint to be not as the patient, but must be convenient, to allow a maximum of technical and efficiency.

b) Hand position on the segment that will be raised and the position of other hands that will hold the proximal segment immediately. Outlet is usually distanced from the pivot mobilized to create a lever arm longer. There are exceptions: prize short, close to the pivot to the outbreak does not

require consolidation, home to joints using high leverage arm, by placing the most distal of gripping, allowing the achievement of effective mobilization without effort. Since the segment to be mobilized to be perfectly relaxed and suspended outlet requires enough force from therapist especially for trunk segments and heavy. Therefore it is recommended suspension straps in a segment during the performance of passive mobilization. Force and rate of mobilization. Force applied by kinetotherapists to the maximum amplitude is usually in the dosage depending on the occurrence of pain, but the experience in cases of patients with pain thresholds are too high or too down.

• Print speed of movement is based on purpose: the slow movement and muscle tone decreases pusher, while the rapid movement of the tone increases.

• The pace of movement can be simple, swinging (in 2 or 4 stroke), while the ends of the trip length.

• Duration of moves is approximately 1-2 seconds, and the extent of maintenance at the end of trip, for 10-15 seconds.

A meeting of passive mobilization of joints according to the last joint (the big ones up to 10 minutes), and according to the patient. Session is repeated 2-3 times per day. It is advisable that before passive mobilization, mobilized by the region to be prepared by heat, massage, electrotherapy possibly through local infiltrations. Also, during the performance of passive movements may be continued application of heat and, occasionally, the movement stopped for a massage for 1-2 minutes. When local reactions: pain, contracture, loss of amplitude or general:fever, feeling of vexation or fatigue, the break between sessions will be higher or even be suspended for several days.

D. Mobilization passive mechanical - mechanical systems using various types of mobilization Kineteck - tailored for each type of articulation and motion in part.

These devices allow autopasive movement, or movement carried out by electric motor or by handling kinetotherapists.

E. Mobilization autopasive - has mobilized a segment with other parts of the body, directly or through plants (usually pulley). This self is a

good way applied by the patient at home or in between meetings organized kinetotherapy room. Mobilization autopasive Example:

- A pressure body - (or a segment of the body) - for example: if a leg equina, pressing the body weight on the leg back, etc…

- By the member healthy - eg hemiplegia in a patient with healthy hand, mobilizes member upper hand and paralyzed;

- By means of an "wire-whip" - eg redori mobilization arm in arm with the shoulder opposite the pull of a rope, with a girth of arm and put it over a pulley;

- Through installations by mechanotherapy called crank or wheel by the patient himself.

F. Mobilization passive-active, and called "passive mobilization actively assisted" the sick, to distinguish "active assisted mobilization", or briefly, "active-passive mobilization", presented in the active mobilization. The method is used for re-education of muscle strength, as well as for reeducation of muscles transplanted in order to improve the new role that you will hold the kinetic chain. If a muscle force value below 2, when the muscle can contract without travel segment, possibly just outside gravity, passive-active mobilization is indicated to help carry out a movement or a full amplitude of motion, preserving the ability of working for a more than repetition.

G. Handling, in principle, is a form of passive mobilization, but the peculiarities of handling, technique, is considered part of the methods and special kinetologic techniques.

2. Transfer techniques.

Transfer is the process by which the patient is amended position in space or move on to another area. In a broader sense the term includes all sequences of movement that are required both before and after the transfer itself: pre-transfer; mobilization in bed; positioning in wheelchair (pos-transfer).

Classification of types of transfer is based on the ability and capacity of the patient to participate in the action, dependent on (in which virtually no part in patient transfer) to independent (only the therapist observes and supervises the transfer) and developmental stage of the disease. There are three types of techniques to transfer depending on the patient's ability to participate in action:

a. Transfers independent in case of their patient, alone and after the prescribed period after a workout.

b. Transfers assisted by one or two people to help (in a certain way) that the patient to rise out of bed and sit in the wheelchair or on other land here (eg, bathtub, bed, etc.).

c. Transfers by lift or whim use installation simpler or more complex. Such transfers are for patients who have no participation in the transfer of their disability is total. Such transfers are done in sections of hydrotherapy lift when the patient is then left in the tank or tub of hydrotherapy. Techniques described proposed transfer to base a few basic principles, following each kinetotherapists to adapt technology to specific needs of the patient you treat. The most common techniques for transfer are: orthostatic pivot (pivot transfer from orthostatic position), with transfer board sliding; pivot (pivot transfer with knees bent); dependent transfer of 2 persons. Choosing one of the transfer techniques will follow in carrying out the transfer of maximum security for both patient and therapist.

Transfer of patients assisted / independent

It may be from wheelchair to bed and vice versa; in wheelchair table, mattress treatment room kinetotherapy, from the toilet seat / tub, the pool club, in pools of walking reeducation, on the walk, the bars gone, the staff of various types. Criteria for selecting the type of transfer are the following: knowledge of the physical patient, knowing the capacity of communication and understanding of the instructions that the patient must follow during the transfer, knowledge of the therapist movements and correct techniques for lifting. Principles of use of correct body mechanics for kinetotherapists during transfer: stay as close to the patient, sit face to face to face with the patient, double knees, not behind using MI!; Backbone to take a neutral position (not bend the vertebral column)!; maintain a broad base of support, heels are maintained at all times on the ground, not to raise more than you can, help someone calls; not combine movements, avoiding the rotation at the same time tilting forward or backward.

a. Preparation for transfer. Before starting the transfer will be taken into account: what contra movement are patient, if the transfer can be done by one person or need help, if the equipment or the patient to be transferred

is in Operating and locked in position, which is the height of the bed / surface that will transfer in relation to height and whether the stock seat height can be adjusted. Preparations for the transfer will include: wheelchair positioning (compared to the area where there is the patient) and the preparation of (blocking, removal of support for arms, legs, etc.) Mobilizing the patient to bed comprises rolling on one side and shift in settled bedside. Correct body positioning of the patient before the transfer will:

- posture the pelvis
- trunk alignment
- extremity positioning

b. Transfer the pivot orthostatic. This type of transfer requires that the patient is able to get to / in orthostatic position and to pivot on one or both MI. Generally may be applied: hemi-palsy / hemi-paresis; reducing generalized muscle strength, balance disorder.

c. Transfer with transfer board. This transfer is indicated for those patients who can not load the lower limbs, but have sufficient strength and resistance to the MS: amputation of lower limbs; vertebro-medular trauma (to force the upper sufficient); hemi-palsy (particular situations).

d. Transfer the pivot with knees bent. This technique applies to the transfer only when the patient is unable to initiate or maintain orthostatic position. It prefers to maintain knees bent to maintain an equal load and provide optimal support for the lower extremity and trunk for pivot

Transfer of patients with increased degree of dependence. Addresses the functional capacity of patients with minimal (eg trauma vertebro-medular C4) or apply to persons with disabilities and high body weight. For these categories of patients can include:

a. *Transfer with transfer board.* Assistance from kinetotherapist is maximum. It depends on the height of therapist / patient, patient's weight and the therapist experience. Variations include placing both forearms or hands around the waist, a trunk or buttocks or a forearm axilar other hand at pants belt. It is contraindicated to pull and grab from the arm / arms paralyzed, possibly because of weakened muscles due to belt around scapulae, injury, instability, etc.

b. *The transfer assisted by 2 people.* This transfer is used for patients with neurological increased degree of dependency or that the transfer may be safe for the patient only by one person. Kinetotherapists a patient is placed before and one behind it.

c. *Transfer to the patient's home.* Transfer the chair or sofa: it is the same as transferring from wheelchair to bed with some specifications: seat or wheelchair are generally less stable. It is risky to rely on the backrest or support arms when the transfer because it can unbalance, when passing the seat on the wheelchair patient can use the healthy hand to support the seat, a seat location is more difficult if it is below and is pillow soft. In this case, adjust seat height by adding a high pillow and also provides a firm surface for transfer.

d. *Transfer to toilet.* Transfer of stock on the toilet seat is generally difficult due to low and inadequate space in most bathrooms. Wheelchair will sit in a more convenient, or even the sharp angle against the toilet. To increase patient safety may be adapted to assist devices such as bar support. Vessel toilet height should be adjusted by the application of this special uplifting. Tub transfer must be very carefully whereas tub is one of the most dangerous areas of the house (because of the risk of slipping). Transfer directly from the transfer of the seat bottom valves is difficult to achieve and requires a good level member education. There is in this sense a bank or a chair to be fixed in the two valves of the legs. In this case the rotation is performed with knees bent, orthostatic pivot or sliding board.

Transfer with mechanical shaft

For some patients because of body size, high degree of disability is required the use of elevator or mechanic lift for transfer. There are a variety of mechanical devices that can be used for patients with different body weight and for different situations: a transfer to another area or transfer in the bath tub or swimming pool (1).

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STUDIA UNIVERSITATIS BABEŞ-BOLYAI, EDUCATIO ARTIS GYMNASTICAE, LIV, 2, 2009

CONTRIBUTIONS MEANT TO IMPROVE THE PSYCHO-MOTIONAL ABILITIES OF MENTALLY HANDICAPPED CHILDREN

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ABSTRACT. Physical education is a necessity for all the members of our society, especially for the individuals with special needs. Hence the newly coined term of „adjusted physical education", which represents a branch of this domain, aiming at the social recovering and integration of such individuals by promoting programmes adjusted to various types of deficiences. In the field of Physical Education the psycho-motional abilities represent an important premise for a correct learning/performing of movement skills on a superior level (the cognitive and creative one) and for a rapid adjustment to various working conditions proper to specific sports branches. Mentally handicapped children represent an ever growing group of people in our society. Either mental, or motional, these deficiencies handicap the children. Their troubles may be mild, medium or serious, whatever they are, they make these persons'life very difficult and create dependency on the people around. Social progress should be reflected in helping them more, in order to socially integrate them and make their life easier.

Keywords: motricity, physical exercise, mentally deficiency persons

REZUMAT. Educaţia fizică se constituie ca o necesitate pentru toţi indivizii societăţii şi în special pentru cei cu nevoi speciale; de aici apare şi termenul de educaţie fizică adaptată care reprezintă o ramură a educaţiei fizice ce urmăreşte recuperarea şi integrarea socială prin promovarea programelor adaptate diferitelor tipuri de deficienţe. În educaţia fizică, capacitatea psihomotrică reprezintă o premisă importantă pentru însuşirea/ efectuarea corectă a deprinderilor motrice la un nivel superior (raţional şi creator) şi de a se adapta rapid la diferite condiţii de lucru, specifice

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diverselor ramuri de sport. Copiii cu deficienţe mintale fac din ce în ce mai mult parte din viaţa noastră. Fie că sunt deficienţe mintale sau motorii ele creează copiilor un handicap. Acesta poate fi uneori uşor, mediu sau chiar grav. De aceea viaţa acestor persoane este uneori foarte grea, fiind dependenţi de ajutorul celor din jur. Prin evoluţia societăţii în care trăim ar trebui să îi ajutăm mai mult, să îi integrăm mai uşor sau să încercăm să le facem viaţa un pic mai uşoară.

Cuvinte cheie: motricitate, exercitiu fizic, deficiente mintale

Aproached themes

The psycho-motional ability with the handicapped children is directly proportional to the seriousness of the mental handicap. The higher the mental deficiency, the lower the motional level.

During the sports activities specific troubles and delays in psychological development accompanied by motional problems can be noticed, such as:
- troubles of general and specific motricity and space coordination;
- troubles in processing audio and visual information;
- difficulties in alternating movements;
- attention focusing difficulty;
- speaking and language problems generating difficulties in communication;
- social behaviour troubles.

The folloving deficiencies are emphasized with the medium and serious mentally handicapped children:
- serious balance troubles;
- disabilities in spatial and temporal orientation;
- ineficient coordination of movements in space;
- troubles of the motional functions of the arms.

These deficiencies became evident during the gymnastics lessons I had with mentally handicapped children. What matters when working with such children is knowing each child’s case, with his/her specific psychic and somatic problems. This is important in order to understand the children’s answer or reaction to the activities they perform.

Getting to know children is a process that can be achieved in time, while working with them. After two months of activities, we managed to

better understand their reactions and behaviour at work. Such children need various and easy exercises, because they get tired and bored after a short time of practice.

The choice and use of simple and clear motional structures, which can be easily understood and performed, is of great importance.

In order to be eficient, such exercises should be started early in life, and should be permanent, complex and formative in character

Terminology explanations

„Deficiency means the absence, loss or alteration of an anatomical, physiological or psychological structure or function. The deficiency may be caused by a disease, an accident or some negative aspects associated with the child's environment, such as lack of emotional life".

The handicap refers to the social disadvantage, to the loss or limitations of a person's chances to participate to the community life on the same level with its other members. (Law of Education No. 84/1995)

The deficiency is a disturbance of a physical, psychological or anatomical structure or function, while the handicap represents the disability of reacting to the expectations of the social environment, manifested as lack of orientation, physical independence and disabilities in socio-professional integration. (Constantin Rusu, 1993).

Objectives

- observing and getting to know people with special needs;
- stimulating the cooperation between the students of The Faculty of Humanistic Sciences-Valahia University from Targoviste and children with special needs;
- the improvement of their movement skills and psycho-motional abilities by means of gymnastics lessons;
- participating to the „Spring Cup"sports contest-county phase.

Hypothesis

We start from the assumption that the physical education means, which are specific to the acrobatic gymnastics, can contribute to the development of the psycho-motional abilities of mentally handicapped children and their social integration.

Methods of research

We based our study on the following methods of research:
- observation;
- study of the scientific literature specific to this field of research;
- use of tests checking the psycho-motional abilities of the subjects of our research;
- interpreting the obtained results.

The activity development

Our main target was involving medium and serious handicapped children in sports activities specific to the acrobatic gymnastics.

The activity took place at The Special School No. 2- Ploiesti in the October 2008-March 2009 period.

It consisted of 22-24 classes of both aerobic and acrobatic gymnastics on music.

The following categories of handicapped children were involved:
-medium/ serious/ mild/ 1 Down syndrome/ liminar intellect/ associated deficiencies.

At the beginning several tests checking psycho-motional abilities were applied. Here they are:
- abdominal force: lying supine position - leg raising in 30 seconds;
- general coordination and legs springiness: long standing jump;
- posterior mobility of the legs: bending the body forward from a sitting position on a bench (+, -cm);
- general coordination: sagital jump splitting legs apart reaching the legs with the opposed arms; We focused on achieving 10 linked jumps coordinated with arms movement. The jumps performed without the arms movement were recorded as well.
- static balance: standing position on one leg on the bench-seconds;
- repetition speed-Tapping test-right hand and left hand on paper, 15 seconds.

Results obtained at the initial testing-October 2008

Name	Diagnosis	Age	Abdom. Force/30 sec	Long stand. jump	Mobility	Segmental coordination	Static balance (sec)	Rep. speed (left/right)
P. B.	Assoc. def	9	15	0,5	-12	10 -arms	12	46/55
C. C.	Liminar intel. Def., mild deafness	10	19	0,8	- 4	10 -arms	15	64/74
O. N.	Medium def.	11	10	0,9	5	10 -arms	20	75/83
N. A.	Serious def.	11	13	0,5	0	R	40	35/42
V. A.	Mental def. -IQ-65	12	15	0,75	- 8	10 +arms	40	73/75
B. J.	Assoc. Def., hyperkin.	12	16	65	- 5	10 -arms	35	65/63
C. M.	Assoc. def.	13	18	1,4	2	10 -arms	40	71/77
C. A.	Down syndrome	13	16	1,0	- 5	10 -arms	10	82/77
P. L.	Mental def. IQ-65	14	12	1,2	- 6	5 +arms	40	89/90
G. S.	Liminar intel def., instrument. troubles	14	16	1,5	3	10 +arms	40	92/101

N. B. –arms=jump without arms coordination
+arms=jump with arms coordination

The lessons consisted in:

I. Body warming for effort

- children in gymnastics file

a. exercises for palms and fingers;

b. palm clapping on specific times - easily learnt exercise and well executed;

c. arms movements:

1. raising arms on shoulders, 2. extending arms upwards, 3. lowering arms on shoulders, 4. stretching arms downwards. - good evolution;
2. arm scissors exercise with palm clapping on times 7 and 8 - quickly learned and well executed on times;
3. windwheel exercise.

d. body exercises:

1. bending the body forward + holding - the seriously deficient children cannot perceive the knee stretching and need help;
2. side bending;
3. side bending with body twisting reaching the legs with the opposed arms. – these movements must be slowly performed;
4. side lunges - the notions of side and forward are not well understood;
5. genuflexions;
6. jumps splitting legs apart - cannot be performed with arms movements.

II. Elements of acrobatic gymnastics

- huddling position and rolling backwards;
- huddlig position and rolling extending the legs backwards;
- leaning on shoulder bones;
- lying supine and raising the body in huddling position;
- rolling the body on order from lying supine position to lying facedown position;
- facedown lying position and body extension raising arms - easy exercise for medium deficient children and difficult for seriously deficient subjects;
- bridge position from lying supine - well executed by the medium deficient children, because they had learned it before with a P. E. teacher
- bridge position from lying supine - learnt and well executed by a child with a serious deficiency;
- from sitting position raising body leaning only on palms and legs -„small bridge exercise”- down syndrome;
- rolling body from sitting position to facedown position - well executed on counting in a small exercise;
- from lying facedown raising on knees - well executed by everyone;
- from kneeling position executing horizontal lever;
- from kneeling position jumping in a huddling position and standing;

These elements were combined in an acrobatic exercise, learned and performed with as little help from the teachers as possible, according to each child;s abilities.

III. Physical training

- from lying supine position raising the body, a partner holding his/her ankles on the floor- very attractive exercise;
- from standing position-genuflexions with partner;
- sagital jumps extending one leg forward on the mat.

Results obtained at the final testing-March 2009

Name	Abdom. Force/30 sec	Long stand. jump	Mobility	Segmental coordination	Static balance	Repetition speed left/right
P. B.	14	0,82	-9	10 +arms	15 "	57/57
C. C.	21	1,12	2	10 +arms	25 "	64/82
O. N.	10	1	3	10 +arms	50 "	65/80
N. A.	10	0,5	6	R	36 "	51/45
V. A.	16	1,1	-3	10 +arms	50 "	83/85
B. J.	20	0,8	0	10 +arms	50 "	73/81
C. M.	21	1,48	9	10 +arms	50 "	63/79
C. A.	16	1	-5	10 +arms	17 "	76/80
P. L.	20	1,24	4	10 +arms	50 "	77/84
G. S.	22	1,48	10	10 +arms	60 "	98/ 105

Results

- all the easy coordination exercises, repeated for a long time, were easily learned.
- body twisting with reaching one leg with the opposed arm was a success with all the children- excellent
- all the children learned an exercise of acrobatic gymnastics, adjusted to their possibilities, which involved fluency, memorization and coordination.

Conclusions

The hypothesis of our research study has been testified by the better results obtained at the second range of tests. They evidence the improvement of the ability of memorizing the acrobatic exercise and the visible amelioration of the psycho-emotional capacities of the children involved in this activity.

As a result of the applied tests the psycho-motional evolution of the children is evident and gave us the satisfaction of the concret outcome of our activity.

On the other hand each child presented, under our guidance, an acrobatic exercise adjusted to his/her individual abilities at the „Spring Cup"gymnastics contest that took place at „Grigore Moisil" School-Ploiesti.

The exercises were performed fluently, without major breaks, without mistakes, demonstrating that even with mentally disabled children, the contest has a stimulative part, creating positive emotions to the participants.

Psychologically speaking, the children involved in the gymnastics activities became more open in communication with their teacher, manifesting their joy to take part in the lessons and a higher degree of socialization in general.

Final conclusion

As a result of a systematic programme of gymnastics lessons all the children underwent a good and very good evolution, that could be noticed in the applied tests and during the participation in the contest.

The children were willing to move and were happy with their results; the problem was the significant differences among them, which required the presence of another teacher at the gymnastics class.

Suggestions

The life of these children can be significantly improved by means of offering them **better working conditions** and the presence of **more specialists.**

Bigger gym halls are required, not just adjusted ordinary classrooms. More space means more movement facilities and implicitly a better coordination for the whole body and better life conditions for the children.

One teacher is not enough to work with such children. Even if the group is small, the presence of an assistent is necessary. As far as their deficiencies are concerned, the children differ to a great extent. Twelve children with eight different deficiencies makes working in group impossible without assistence.

Finally, we suggest a higher degree mobilization from the part of the students in voluntariate actions with the children with special needs, in order to understand their joy when they are seen and noticed by the people around.

The students'participation to voluntariate actions will help them better understand such children, because, in the long run, they can themselves become the specialists meant to develop sports activities with children of very different categories.

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EXTREM SPORT. A QUALITATIVE RESEARCH

CRĂCIUN MARIUS[1]

ABSTRACT. Extrem sport. A qualitative research. The purpose of this study was to grow the understanding of the meanings and motivations associated with involvement in extreme sport. Since extreme sport is a relatively recent phenomenon, not so many psychological research in this area has been carried out. The sample of participants was composed of six athletes participated in two extreme sports. We adopted qualitative research methodologies in order to better access meanings and motivations associated with extreme sports. Conclusions: participants in extreme sport are searching more than thrills and excitement, they decide a deliberate and self-conscious approach to the activity, making informed choices rather than simply acting out unresolved conflicts or implementing distorted cognition.

***Keywords*:** extreme sport, qualitative research, risky behaviors, sensation-seeking, phenomenological orientation

REZUMAT. Sportul extrem. O cercetare calitativă. Scopul acestui studiu a fost înțelegerea mai bună a sensurilor şi motivațiilor asociate cu implicarea în sporturile extreme. Din cauză că aceste activități sunt fenomene relative recente, nu există prea multe cercetări psihologice care să vizeze studierea lor. Metodologia de cercetare este calitativă şi a vizat un număr de 6 sportivi. Concluzii: participanții în sporturile extreme caută mai mult decât plăcere şi senzații, ei se îndreaptă spre o astfel de activitate prin alegeri conştiente şi deliberate. Sportivii nu apelează la aceste activități pentru a-şi rezolva conflicte latente sau datorită unor cogniții distorsionate.

Cuvinte cheie: sport extrem, cercetare calitativă, comportament de risc, căutare de senzații, orientare fenomenologică.

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Introduction

In general, we talk about extreme sport as a recreational physical activity, which imply a risk for serious physical injury or even death. We labeled "extreme sport" physical activities like: bungee-jumping, sky-diving, skate- and snow-boarding, surfing, paragliding, rock-climbing, kayaking, rafting, canyoning and so on. Often, our perceptions about high-risk sportsmen is affected by stereotypes like: participation in these activities has been considered as the expression "of a death wish", athletes were seen as emotionally unhealthy or crazy. Per contra, other studies stipple out that these activities have resulted in positive personal changes, or participants have a powerful "life wish" and a desire to ceiling experiences.

In all countries participation in such "alternative" sports has increased. For exemple, in England, over 5 per cent of the adult population was taking part in at least one adventure activity on a regular basis (Campbell & Johnson, 2005).

Since extreme sport is a relatively recent phenomenon, not so many psychological research in this area has been carried out. We can divide these researches into three categories: linked with personality, birth order effects and the meanings and motivations behind high-risk behaviour. The first category of those studies tried to establish a relationship between the practice of extreme sport and certain personality traits. Most of these have focused on sensation-seeking, this type of studies compare scores on Zuckerman's Sensation Seeking Scale (SSS) obtained from experimental and control groups. These studies showed correlation between extreme sports practitioners and a preference for novel, high risk activities. But the size of the correlations between sensation-seeking measures and chosen leisure activities (including dangerous sports) across a range of studies are modest, controlling only around 10 per cent of the variance in behaviour (Furnham, 2004). This means that other factors must contribute to the decision to practice extreme sports and that sensation-seeking as a personality trait constitutes only a modest influence. The second category of studies shows that those who that those born last are more likely to participate in high risk activities (Casher, 1977). Others studies did not support the hypothesis that later born children are more likely to engage in high-risk recreational activities (Seff, Gecas, & Frey, 1993). The last category of

studies adopted qualitative research methodologies in order to access meanings and motivations associated with extreme sports. For example, Celsi et al. (1993) conducted a study of a skydiving community, using a qualitative research, revealed a dynamic process of motivational change as individuals progressed from novice to experienced skydiver. While motives for beginers tended to be interpersonal (e.g. adopting a such sport being influenced by friends) and hedonic (e.g. the desire for "fun"), maintenance of involvement was motivated by a combination of the desire to achieve mastery and status, and the opportunity to construct a new personal identity. With increasing involvement, participants were motivated by what the authors call "higher-order values". For example, the achievement of experiential qualities behaviors that transcend normal, everyday experience.

Often, participants in extreme sports are using strategies for minimizing their perceptions of risk using "optimistic bias". In conclusion, this third category of studies suggest that involvement in extreme sport can be understood as a dynamic motivational process and risk acculturation leading to the formation of a high-risk identity. Albeit, risk-taking behaviour are unusual for many people, these have nothing in common with pathological traits or states.

Our research presented in this article try to grow the understanding of the meanings and motivations associated with involvement in extreme sport.

Methodology

There are many different ways to use a phenomenological orientation in order to carry out empirical data but we choose Colaizzi's (1978) guide of how phenomenological research may be driven. We tried the identification of the basic structure of a phenomenon based upon the convergence of accounts.

Participants

The sample of participants was composed of six athletes participated in two extreme sports. Three of them were skydivers (all male), three were paragliding, (two male, one female). We used two criteria for including participants in the study: (a) Experience with the phenomenon under investigation: (b) the ability to talk about matter reasonably.

Instruments

Prior to the main study, we carry out a semi-structured pilot interview with a mountaineer who practice this sport for 20 years. An interview guide was developed which focused on recall and describe in detail one particular, concrete episode of extreme sport activity. This interview guide was developed using data from research on extreme sports, and is based on a predetermined schedule of open-ended questions and standardized questions. These included questions about their feelings before and after taking part in extreme sports, their best/worst experiences with it and the qualities and meanings associated with the experience. The interview begin with the warm up question, ‘‘How did you decide to practice …?’’ which was designed to ease the participants into the interview and create a frame of reference for the questions that followed. Subsequent questions focused on difficulties and on coping strategies used by athletes. The open-ended questions utilized in the predetermined schedule were worded according to the recommendation of Patton (1990) and Kvale (1996). We used six standardized questions, four of this questions were designed to specify not only how the participants were thinking (‘‘What were you thinking when ?’’), feeling (‘‘How did it make you feel when ?’’), and behaving (‘‘How were you behaving when?’’) throughout their experiences, but also how they saw themselves (‘‘How did you see yourself when?’’) at key points in their discussion. The other two standardized questions: (‘‘I’m interested in what you were saying about!, Can you tell me a little bit more about that?’’ and ‘‘Do you mean that?’’) provided the researcher with the opportunity to probe deeper into the participants’ experiences and interpret their statements, giving the participants a chance to agree, disagree, or elaborate further (Kvale, 1996).

Procedures

The athletes contacted (via informal relationship) showed their interest in participating. The interviews were conducted by one researcher at each participant’s preferred location and were recorded. The interviews lasted from 40 to 60 minutes.

Content analysis was done in order to classify and reducing the textual information to more relevant and manageable information units (Weber, 1990). The analysis departed from raw data and proceeded by an inductive category development which gradually became a deductive category application, always having as a reference the main points of the interview guide. The list of codes were grouped into general dimensions. As Jackson (1995) has suggested, a similar process to facilitate understanding of a large amount of data and developing generalized themes from individuals' specific statements used by sport psychology research. This procedure was followed for each of the six interview transcripts, generating six lists of themes and six general statements. After that we selected all those themes shared by all participants and to group them under shared headings.

Results

The descriptive statement is structured around a series of themes. Four of them were invoked by all participants. These were: Challenge, Mastery and Skill, Enjoyment and Focused on the immediate demands. A further two themes were shared by at least half of the participants: Being different from the majority and Removing unpleasant emotional states.

General themes

Challenge. Participants talked about extreme sport as an opportunity to push themselves to their limits, possibly even beyond, both mentally and physically:"It is not a thing easy to learn. You're using all your body and your mind and it's a challenge" said a skydiver. participants to find out what they were capable of, and, having identified their current limits, to push themselves yet further.

Mastery and Skill. Participants described their pleasure in learning difficult things over a period a time, and how satisfying it is to acquire a "sense of mastery": "Gaining experience and getting better at performing the sport generated a sense of satisfaction, and this was experienced as rewarding. I am aware of my level of expertise and I compare my current abilities with those of my peers". This " sense of mastery" is experienced by some of participants when is recognized within their community, or upon their own assessment of their progress.

Enjoyment. Feelings of joy and happiness were also invoked, and the experience was described as "magical", "fantastic'" and 'blissful". These states are different from the normal range of emotions experienced by participants in their everyday life. Participants described these emotions as rare and precious moments.

Focused on the immediate demands. Participants eliminate all other thoughts, feelings or perceptions. During such moments, there appears to be no mental space available for anything other than the task at hand, and as a result, one's world is reduced to the immediate present. Participants described life becoming very 'simple' and 'straightforward' as a result of being in present. They experienced this state as calming and relaxing, comparable to a "meditative state".

Additional themes

Being different from the majority. Majority of participants were aware that other people took note of the challenging nature of their activities and that this influenced the way in which they were perceived by others: "I think it's impressive for other people to find out that this is what I do".

Removing unpleasant emotional states. Was experienced as a fundamental need which, when frustrated, gave rise to distinctly unpleasant emotional states such as feeling "stressed", "unhappy", "itchy". Two of participants used the term addiction to describe their relationship with extreme sport, and they expressed the belief that without it they would be less able to function in everyday life.

Conclusions

This study represents an examination of only a small sample of athletes, participating in extreme sport. It is important to recognize that the group may not be typical for all sports, given the possibility of response-bias in the sampling method, and that experiences may vary between different type of extreme sports.

The analysis presented here suggests that taking part in extreme sport holds meanings and fulfils psychological functions and means more to participants than searching for thrills and excitement, and their deliberate

and self-conscious approach to the activities suggests that they are making informed choices rather than simply acting out unresolved conflicts or implementing distorted cognition. Participants are aware that extreme sport had increased their levels of self-esteem and self confidence, being a means of personal growth push themselves up to and beyond their physical and psychological limits. In other words, producing the experience of 'flow' may be a way of managing existence tensions in a creative and purposeful way, revealing a therapeutic function of risky behaviors,

However, some participants, engaging in extreme sports experienced addiction then simply a desire. This suggests that while experience of extreme sport is characterized by tensions and contradictions, being a complex phenomenon. It may fulfill a therapeutic function it may also lead to dependency. Future research needs to be done because extreme sport participation is more potent, life-enhancing endeavor. Participants report deep inner transformations that influence word views and meaningfulness.

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STUDIA UNIVERSITATIS BABEŞ-BOLYAI, EDUCATIO ARTIS GYMNASTICAE, LIV, 2, 2009

LET'S LEARN TO SWIM!

Swimming today and swimming 162 years ago at the Bethlen Gábor High School from Aiud

KEREKES FERENC[1]

ABSTRACT. Swimming is for sure one of the most beautiful and efficient sports, which can be practiced either in cool weather or hot summer days and it's a sport for all categories from babies (small children to elders). The Bethlen Gábor High School was one of the first institutions which recognized the importance of the physical exercises and their role in educating young children. Swimming was practices from the 19th century. Having such a background, we try to make accessible and attractive this sport to our students, too.

Swimming covers all the basic necessities of the human being from a wellness state, to an integral formation of the person from cognitive, affective and motional point of view, improves the physical condition of the swimmer and makes the basis of training to competitors or only for recreative goal. The beauty of swimming is not only exterior one, but at the same time has on interior beauty. The antique world appreciated the benefic role of swimming. During the Middle Ages, physical education, swimming and even the using of water were considered "tools of the devil". The philosophers of the 18th century put the physical education at the same level with the spiritual education. In the 19th century swimming appeared as a sport, at the first time with the first official contests, which took place at London. The biggest advantage of swimming is that the muscles and articulations are put into motion without supporting any weight. The practicing of swimming especially for children helps to the harmonious physical development on morpho-functional level, contributing not only to the formation of very important moral qualities, but also to the education of the character.

Keywords: swimming, body, physical activity, health, spirit, competition, children.

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REZUMAT. Să învățăm să înotăm !Înotul azi şi înotul de acum 162 de ani la Colegiul ”Bethlen Gábor” din Aiud. Înotul este cu siguranță unul dintre cele mai frumoase şi eficiente sporturi, fiind în acelaşi timp un mijloc de menținere şi de întărire a sănătății, contribuind la dezvoltarea armonioasă a organismului. Colegiul “Bethlen Gábor”, instituție de rang academic la începuturile sale, a fost unul dintre primele instituții, care a recunoscut importanța exercițiilor fizice şi rolul lor în educarea tinerilor. Primele referiri despre exercițiile fizice şi activitățile de înot, desfăşurate sub îndrumarea unor profesori de educație fizică datează din sec. al XIX-lea. De-a lugul timpului elevii colegiului au descifrat tainele înotului în mai multe bazine de înot, proprii sau ale oraşului cu profesori de specialitate. Frumusețea înotului nu este doar una exterioară, ce ține de aspectul fizic plăcut al înotătorului, ci şi una interioară ce ține de spirit. Lumea antică, aşa cum atestă izvoarele istorice scrise şi nescrise, a apreciat rolul benefic al înotului. În Evul Mediu înotul era considerat „lucru diavolesc”. În secolele XVII – XVIII, mari pedagogi şi filosofi au situat educația fizică pe acelaşi plan cu cea spirituală, contribuind astfel la un nou avânt al înotului. Cele patru procedee sportive de înot care s-au conturat sunt: *craul, spate, bras, şi fluture*. Înotul are o influență deosebit de favorabilă asupra dezvoltării organismului, începând cu procesul general de creştere, de călire şi întărire a rezistenței organismului, de mărire a capacității generale de efort. Înotul tonifică musculatura şi sistemul nervos, uşurează senzația de greutate a corpului, regularizează mişcările respiratorii şi bătăile inimii, relaxează, combate contracțiile musculare.

Cuvinte cheie: înot, activitate fizică, sănate, competiție, spirit de competiție.

Swimming is for sure one of the most beautiful and efficient sports, which can be practiced either in cool weather or hot summer days and it’s a sport for all categories from babies (small children to elders). It’s a way of keeping and strengthening your health which contributes to the harmonious development of the organism.

The Bethlen Gábor High School, which at first was at the academic level (it was an academy) was one of the first institutions which recognized the importance of the physical exercises and their role in educating young children. The first written notes regarding swimming date from 1847, when

physical education was taught in organized way during physical education lessons in this school. At the same fine notes are written down about swimming activities, which were held by physical exercise teachers.

During the years the students from this school have been learning the secrets of swimming at several swimming pools, being them their own, or the pools of the town. Specialized teachers like Freitag Gustáv (physical education and swimming teacher from 1847) and Schimdt György. (physical education and swimming teacher from 1867) taught swimming at the pool of the school from the Cseremalom Garden, and then at the first swimming pool from Felenyed, near the stream Mujina, from which took its water. The first outdoor swimming pool from Austro Hungarian Monarchy was as well in Aiud on Fűrdő Street (the street was named after this open-air pool). The first concrete pool from Romania was built in Aiud, too. To these pools the students of the school could go in organized way, and learn to swim with specialized teachers. All the pools had different size basins, for beginners and advanced learners, too.

Having such an experience in the practicing of swimming, we try to make accessible and attractive this sport to our students, too because puts in motion all the muscles groups.

We organize trips to swimming pools situated in other cities, and swimming courses for the beginners at the newest swimming pool from Aiud.

Why should we learn to swim?

Swimming covers all the basic necessities of the human being from a wellness state, to an integral formation of the person from cognitive, affective and motional point of view, improves the physical condition of the swimmer and makes the basis of training to competitors or only for recreative goal.

Learning to swim has to be seen as well as a necessity to life protection when you are in danger of drowning. We are sometimes the witness of painful situations when for the lack of the minimal swimming elements people loose their lives.

Short history of the swimming

The beauty of swimming is not only exterior one, which is connected to the pleasant physical aspect of the swimmer, but at the same time has on interior beauty which is connected with the spirit of the swimmer.

The spoken and written notes say that the antique world appreciated the benefic role of swimming. In the Roman pools for example swimming was practiced by youngsters and elders too, because it was one of the ways of military preparations.

After its flourishing period, came the decline of swimming when people hardly recognized the hygienic role of water and swimming. During the Middle Ages, the clergy tried to focus on the spiritual education and not on the education of the body. Physical education, swimming and even the using of water were considered “tools of the devil” which contributed to a total lack of hygiene and draw to several epidemics. Those who crossed the rules and swam were considered eccentrics or were punished.

Salvation came from the great literary people, the educators and philosophers from the 17th and 18th century like Montaigne, John Locke and J. J. Rousseau, who put the physical education at the same level with the spiritual education, contributing this way to the new flourishing period of swimming.

Swimming was practiced as physical exercise for many years which led to the competitive aspect of it, many people being interested not only of how much can they swim but as well how fast they can swim. This way appeared swimming as a sport (sport swimming) in the 19th century, at the same time with the first official contests, which took place at London. From this century new swimming techniques were born, new training methods appeared, new costumes were tailored, everything had been improved and updated after each big competition.

The four swimming procedures are: freestyle or "front crawl", backstroke, breaststroke and butterfly.

Crawl

Backstroke

Breaststroke

Butterfly

The benefits of swimming

Swimming has a special influence on the development of the body, beginning with the general growing process, than the strengthening of the organism and than the growing of the general capacity of effort.

With the simple fact that he is in water, the swimmer has special sensations than of being on the surface.

Seeing that in water he can do whatever he wants with his body challenging the low of gravitation, gives to the young sportsman the sensation of feeling that he is playing on a pleasant and interesting way. This good mood created by being in this environment has a benefic influence on the psychic.

Swimming shapes the muscles and the nervous system, makes easier the body weight, helps to normalize the respiratory movements and the hart beating and fights against the muscle contractions.

The biggest advantage of swimming is that the muscles and articulations are put into motion without supporting any weight dominating this way the tension that exists at their level, which leads to less injuries. The resistance of the water determines the body to consume much more energy for being able to move, modeling and forming it by fighting against cellulites.

The practicing of swimming especially for children helps to the harmonious physical development on morpho-functional level, contributing not only to the formation of very important moral qualities, but also to the education of the character.

I think, for all this positive benefits of swimming, children should be encouraged to practice swimming.

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STUDIA UNIVERSITATIS BABEŞ-BOLYAI, EDUCATIO ARTIS GYMNASTICAE, LIV, 2, 2009

PARADIGM SHIFT IN EDUCATION – LIFELONG LEARNING AND E-LEARNING IN THE HIGHER EDUCATION

(Profiting from the knowledge society at regional level)

KOKOVAY ÁGNES [1], KAKUK ANDREA [2]

ABSTRACT. For centuries, Hungary has played an important role in education in this region of Europe. The social and economic transformation in the past few decades have considerably changed both the contents and structure, as well as the methods, of education. It is to be realized that in the next period, mental resources will be considered to be the most important resources. Soaring interest in e-learning in the past thirty years is not only attributable to the results of technology applied in pedagogy, to the organization of education, and to the boost in enrolment to higher education, but also to the ever deeper crisis of education spreading over the world. A major contributory factor to the spread of e-teaching was the need for an educational structure which can adjust more flexibly to social needs. The task of tertiary institutions of education so far pursuing elite training, is to undertake mass education as the token of economic development in adjustment to these social needs which are also reflected by the multiplication of enrolment at the College of Nyíregyháza, as well. Furthermore the nature of knowledge has changed, and there was a paradigm shift in higher education too. Owing to these changes the College of Nyíregyháza aims to become a regional knowledge centre rather than beeing a mere traditional college providing education in accordance with the expectations and requirements of a knowledge based society. With steady infrastructural developments carried out at the campus of the College of Nyíregyháza, the technical conditions to lauch Internet-based distance teaching were created. To have adequate human resource, interested lecturers attended a three-term course to acquire theoretical and practical knowledge. During this

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program several e-learning materials have been produced as well. What is more there is a growing cooperation with Jedlet, a Canadian based institution providing first class e-learning materials now available for our students. Education has always been one of the major priorities of the European Union together with an emphasis being put continuously on the importance of learning foreign languages. TheCollege of Nyíregyháza puts emphasis on this issue too. Lecturers of the Department of Foreign Languages use not only e-learning materials, but teach English, German and French for specific reasons. A research has been carried out to find out the opinion of our students's relating to attendance in and efficiency of the e-learning courses. Presuming that a positive judgement might form a good base for the implementation of an effective lifelong learning process initiated at the College as a knowledge centre, which can be the solution to the returning problems of the labour market in the region. Traditional education is gradually giving way to learning management, as the role of independent, self-governed learning increases continuously. Though the rate of e-learning is not expected to rise as immensely as it was supposed earlier, still it could be a great chance to extend education to those who otherwise wouldn't have any possibility to learn or retrain themselves.

Keywords: e-learning, regional knowledge centre, virtual campus, retraining

Introduction

Today, the average Hungarian employer usually does not change job more than two times during their career. It means that the employer needs considerable re-training two times in their career, but as we are approaching the average of the industrially developed countries (OECD), this figure is likely to increase to five or six. In Hungary this change will necessitate the training and re-training of approximately 600 thousand employees at a time. A glance at the capacity of the colleges and universities shows that a traditional educational system is unable to meet this challenge. It is therefore inevitable to develop and elaborate educational methods and systems that will be able to handle the situation.(Kokovay 2007)

At the College of Nyíregyháza, there have been research programmes into the use of IT in undergraduate training and life-long learning since 1995.

With development projects currently in the phase of implementation, the institution makes efforts to create an *integrated e-based infrastructure,* able to flexibly meet the continually changing social needs. The first step in the process was the creation of the infrastructural background, followed by the creation of the necessary human resources–that is, recruiting and training the experts of e-learning and education.

Then came the time to develop and produce the learning materials making e-learning and blended-type training programmes possible. These materials ensure the long-term further training of the graduates of the institution. In this way our graduates will be able to preserve their competitiveness in the labour market.

In this lecture we wish to present the results of a large-scale questionnaire survey meant to examine people's attitude to e-learning and blended training as well as the efficiency of these forms of training.

E-learning Materials at the College of Nyíregyháza

After the preliminary surveys (Notes, Chapter 1), course material development focused on two areas: functional competences and key competences.

The course materials offered to students are partly developed by the college and are partly the results of cooperation with other institutions.

The areas involved in the research have been inspired by the results of two education-strategic research projects carried out in the European Union: the "Delphi"-research and the so-called "weak signal" research (2004). (Notes, Chapter 2)

Our selection of topics is justified by the increasing number of our present and former students who make use of the new opportunities, thus illustrating the great significance of life-long learning.

The Objective of the Questionnaire Survey

The survey that we intend to present here was planned to use students' opinion for illustrating the significance of e-learning in undergraduate training and life-long learning.

As the institution largely recruits its students from areas that are regarded as underdeveloped regions in the country, we found it important to include factors influencing the employment of our students, and not only their experience of employment after they have found a job.

Hypothesis

At the launch of the survey we supposed–based upon our preliminary experience–that the opinions of the students were going to be positive, especially in the following fields:

- we supposed that students between 20 and 30 years were going to choose distance learning;
- it was also supposed that students with Internet access at home were going to learn with this method;
- we pre-supposed that as a result of the didactic concepts of the programmes, students' learning activity and motivation were going to improve;
- it was assumed that the performance of the students using the new possibility (e-learning) was going to be better than that of the students studying with the tradtional methods.

Formulating the Research Questions

Is students' attitude to e-learning as a means of study really positive?
Is it possible to clearly define the age group the members of which opt to use this possibility?
Do students who choose e-learning courses have Internet access at home?

Is the improvement of learning motivation really tangible among students whose learning activity increases?

Do these students really score higher at end-semester exams and tests than their colleagues who study with the traditional methods?

Persons Participating in the Survey

Participants were selected randomly from NEPTUN, the standard administration system of the institution. 2,000 questionnaries were sent out

in e-mail. The number of answers received was 976, which is a fairly good return at questionnaire surveys (48,8%).

The participants were the students of the various courses of the College of Nyíregyháza. They came from two groups. The first was the group of undergraduate day students (428 people), the second was that of undergraduate correspondent students (548 people).

Implementation of the Survey

As it has been mentioned previously, students received the request in e-mail (Supplement 1) on 10 October 2008, then those who were ready to answer, also received the questionnaire and returned it completed by e-mail to address specified. The final deadline for returning the questionnarie was 30 November 2008. Students had one month at their disposal to formulate and return their answers. During that time, they received a notice every week, and the questionnarie was attached to it again. We shared the results of the processed questionnaries with the participants if they so requested, and we offered the possibility to them to use the results in their dissertations. They were also invited to take part in processing the results.

Statistical Methods Applied

In order to analyse the results of the questionnaires, we carried out basic statistical calculations (mean, distribution and correlation calculations).

At the tests measuring the level of knowledge, as they were primarily nominal data and a nominal scale, we mostly used cross-table analysis and Pearson's χ^2-test for the comparison of the results (for two-variable and multi-variable data as well). In addition to the nominal scale (good answer and wrong answer) we used an interval scale for certain cases and we also received data meaning an ordinal scale (tests, scores of series of exercies). For a comparative analysis of data of different types we used variant analysis and co-variant analysis.

The Structure of the Questionnaire

The questionnaire consisted of 12 questions (Supplement 2), and the questions were arrenged in three groups. The first group contained questions of demographic type (Questions 1-7), related to the age and gender of the participants, and to the possession of a computer and access to the Internet.

The second set of questions contained those that related to the use of computers (Questions 8-9), whereas the third set contained questions sought an answer about students' opinion of the e-learning course material (Questions 10-12) and method (Question 13).

The results achieved with e-learning (grades and marks) were selected from the standard administration system (NEPTUN). In addition, we prepared a knowledge measuring test to each subject. As several courses and subject majors–a total of 12–were included in our examination, we decided not to attach the various closing tests. Here we include the results only.

A Presentation of the Results of the Questionnaires

Our preliminary hypothesis, that is, the attitude of students to e-learning was going to be positive, proved to be profound. Almost eighty per cent of the participants found the new method good and very good (42,03% and 26,53% respectively), and only ten per cent regarded it worse than the traditional methods (1,94% and 7,99%) (Chart 1).

STUDENTS' ATTITUDE TO E-LEARNING

Students' attitude		
Elements of the "Likert scale"	**Occurence**	**Per cent**
Very poor	19	1,94%
Poor	78	7,99%
Medium	210	21,51%
Good	410	42,03%
Very good	259	26,53%

Chart 1: Students' opinion about distance learning

We subjected the result to a more differentiated analysis, as we wanted to find out whether there was any difference between the attitudes of undergraduate day students and undergraduate correspondent students. The results suggest that correspondence students find the new method better than their colleagues studying full-time (see Chart 2).

THE OPINION OF STUDENTS ABOUT DISTANCE LEARNING IN A BREAKDOWN ACCORDING TO GROUPS

The opinion of students				
Elements of the ”Likert scale"	**Frequency**		**Per cent**	
	Day students	**Correspondent students**	**Day students**	**Correspondent students**
Very poor	11	8	2,70%	1,4%
Poor	64	14	15,00%	2,6%
Medium	163	47	38,35%	8,5%
Good	**106**	304	**24,65%**	**55,5%**
Very good	**84**	175	**19,17%**	**32%**

Chart 2: The opinion of day students and correspondent students

In order to receive an accurate view of the students, we offered the possibility of providing a short textual opinion. The asnwers thus received were entered into four categories:

- positive opinions,
- negative opinions,
- neutral opinions,
- no explanation for the answer was provided, that is, the student did not give reasons.

The overwhelming majority of the students (71,10%) gave a positive answer about the programme, only 9,52% of the participants had a negative approach (Chart 3).

Apart from requesting the students’ opinion about the programme, we also asked them whether they would be ready to enroll at such a training course. The answers were fairly surprising. More than ninety per cent of the participating students said that they would be ready to choose this opportunity again.

OPINIONS ABOUT THE PROGRAMME

Individual opinions		
The reception of the programme	**Occurence**	**Per cent**
Positive	694	71,10%
Neutral	51	5,22%
Negative	93	9,52%
no opinion provided	164	16,80%
Ready to participate again	**948**	**97,13%**

Chart 3: Individual opinions about the programme and methods.

No significant differences were found between the opinions provided by the two groups in terms of their approach to the programmes and methods (Chart 4).

OPINIONS ABOUT THE PROGRAMME IN A BREAKDOWN ACCORDING TO GROUPS

Individual opinions				
Opinions about the programme	**Occurance**		**Per cent**	
	Day students	**Correspondence students**	**Day students**	**Correspondence students**
Positive	**293**	**401**	**68,49%**	**73,12%**
Neutral	18	33	4,10%	6%
Negative	41	52	9,58%	0,8%
No opinion provided	76	88	17,80%	16,08%
Ready to participate (again)	**410**	**538**	**95,89%**	**98,31%**

Chart 4:The opinions of students participating in undergraduate day- and undergraduate correspondent courses

Our preliminary assumption that primarily students between 20 and 30 years of age were going to choose learning with the help of a computer was only partially justified by the results.

Although students in this age are in a majority among the participants (Chart 5) and the lumped results seem to underpin our original ideas, but a comparison of the age distribution of students enrolling at e-learning with the age distribution of all the students this assumption appears to be refuted (Chart 6).

PARTICIPANTS ACCORDING TO AGE

The age of participating students		
Age groups	**Occurence**	**Per cent**
18-30	1267	48,41%
31-40	974	36,18%
41-50	335	12,80%
50-	31	1,18

Chart 5: The distribution of the participants according to age

The number of students enrolling at various courses was 2,617 in the period concerned. The majority of the students–as shown in Chart 5–were in the age category of 18-30 years. But a comparison of the figures of the students enrolling at undergraduate day (UD) and undergraduate correspondent (UC) courses, a greater share of students of 31-40 years is found (Chart 6).

THE DISTRIBUTION OF STUDENTS ENROLLING AT THE TWO WAYS OF TRAINING

Age of students						
Age categories	**Occurence**				**Per cent**	
	All the applicants	**Enrolling ate-learning**			**Share of those choosing e-learning**	
	UD	**UC**	**UD**	**UC**	**UD**	**UC**
18-30	957	310	318	117	33,22%	37,74%
31-40	229	745	102	410	44,54%	55,03%
41-50	10	325	8	12	80%	3,69%
50-	-	31	-	9	-	29,03%

Chart 6: The number of participants compared to the entire number of students

Prior to the launch of the survey, we believed that students were going to be decisively influenced in their choice of training course by the fact whether they possessed a computer or not (Chart 7), and whether they had Internet access or not.

THE NUMBER OF STUDENTS PARTICIPATING IN THE SURVEY POSSESSING A PC

	Day training		Correspondent training		Total	
	Occurence	**%**	**Occurence**	**%**	**Occurence**	**%**
Possessing a PC	323	75,3	361	65,9	684	70,2
No PC	99	23,3	187	34,1	286	28,6
Used to possess a PC	6	1,4	-	0	6	0,6

Chart 7: The proportion of students possessing a PC

All in all, 70,2 % of the participants possessed a computer, which is twice as high as the national average (national average: 31%). It is to be noted, however, that the national average contains all groups and layers of society, whereas only college students participated in the survey (Bernáth, 2005). In the national statistics it is pointed out that among the owners of a PC those who have a college or university degree and those who are between 18-45 years of age are overrepresented.

As it is indicated by the answers, close to one third of the students do not have a computer. As suggested by the data gathered by the questionnaire, students at undergraduate day training courses have access to a computer at the library, while those at the correspondent courses use the computer at their jobs (Chart 8). Access to a computer was therefore not a problem, it was not an obstacle in the way of using the new method of learning.

CHARACTERISTICS OF COMPUTER ACCESS

Place of computer access				
Name of location	**Occurence**		**Per cent**	
	UD	**UC**	**UD**	**UC**
Library	247	86	57,69%	15,72%
Students' hostel	135		31,65%	
College department	39		9,10%	
Job	7	394	1,56%	71,90%
Village house/ community house		46		8,40%
Friends/ acquaintances		22		3,98%

Chart 8: Internet and computer access of students who do not have a PC of their own

The proportion of possessing an Internet access matched the national average (Chart 9). The differences between the two groups were minimalis. It was therefore not a factor that influenced their choice.

THE NUMBER OF STUDENTS WITH INTERNET ACCESS

	Day courses		**Correspondence courses**		**Total**	
	Occurence	**%**	**Occurence**	**%**	**Occurence**	**%**
Access	129	30,1	151	27,3	280	28,6
No access	299	69,9	397	72,7	696	71,4

Chart 9: The number of students with Internet access

As for the learning motivation of the students, we examined the frequency of their dealing with the learning materials, and also surveyed for what other purposes our students use the Internet, apart from studying. In order to have a basis for comparison, we reuqested students studying with traditional methods to complete this part of the questionnaire (control group).

We have found considerable differences between the learning habits of students studying with the traditional methods and those using the new methods (e-learning).

90,43% of the participants of distance learning–driven by the didactic concept of the learning materials–*dealt with the materials regularly, but it was not the case with the students learning with traditional methods (31,81%).* (Chart 10).

LEARNING HABITS OF THE PARTICIPANTS

Learning habits				
	Occurence		Per cent	
Frequency	Test group	Control group	Test group	Control group
Monthly	93	187	9,58%	19,31%
Weekly	**789**	307	**80,82%**	31,81%
daily	**14**	-	**1,40%**	-
Every two days	**80**		**8,21%**	-
Irregularly	-	**359**	-	**36,36%**
Just before exam	-	**121**	-	**12,50%**

Chart 10: Learning habits of the participants in the survey

Students in the traditional system studied in a more irregular pattern, often dealing with the material just before the exams and tests. According to their own report, they used the Internet for entertainment, games almost exclusively (Chart 11).

For the participants of e-learning, gathering materials and other useful applications of the World Wide Web dominated.

HABITS IN USING THE INTERNET

Habits in using the Internet				
Description	Occurence		Per cent	
	E-learning group	Control group	E-learning group	Control group
Data gathering	**253**	**11**	**26,00%**	**1,10%**
Studying	**976**	0	**100%**	0
Browsing	173	58	17,80%	5,70%
Chat	80	**466**	8,20%	**45,50%**
Games	14	139	1,40%	13,60%
Other	120	24	12,30%	2,30%

Chart 11: The habits of the participants in the survey in using the Internet

A comparison of the performances of the students in the traditional system and that of the students in the e-learning system

Using Pearson's χ2- test for the lumped results of the closing tests, we have found considerable differences between the students studying in traditional methods and those using e-learning ($p < 0{,}001$) (Chart 12). The difference suggests the higher performance of the users of the new methods.

RESULTS OF THE CLOSING TESTS

	N	Value	Tolerance	Significance
Pearson's χ^2- test	1950	1244,517	509	0,001

Chart 12: Pearson's χ^2- test: a comparison of the closing test results of the students studying in the two methods

We analysed the results in a more detailed breakdown, as we wished to find out whether there was any difference between the results of the students in the undergraduate day (UD) and undergraduate correspondent (UC) systems (Chart 13).

A COMPARISON OF THE RESULTS OF THE STUDENTS STUDYING IN THE TWO SYSTEMS

System	N	Value	Tolerance	Significance
UD training	948	503,425	319	0,05
UC training	1002	752,384	431	0,03

Chart 13: Pearson's χ^2- test: a comparison of the results of the students studying in e-learning and in the traditional method

The calculations confirmed the previous results. In both cases the students of e-learning scored significantly higher than those in the traditional system. The differences were always considerably high in favour of the users of the new method.

Assessing the Results of the Questionnaries

Based upon the results presented above, we have received the following answers to our hypotheses:

Our first hypothesis, expecting the students to have a positive attitude to the new programmes, was confirmed. As more than fifty per cent of the students in both the undergraduate day- and undergraduate correspondent training found the new system of training as well as the new learning materials good or very good.

The next hypothesis was only partially confirmed, as students between 31-40 years of age were in majority among the participants, and not those between 18 and 30. It is likely that the reason for that was that correspondent students constituted a majority among those starting e-learning.

At the launch of the survey we assumed–based upon the findings of a previous examination (Vonáné, 2002)–that the most important problem among the students was going to be the access to a computer, and primarily students already possessing a computer and Internet access were going to choose the new form of learning. We were surprised to find, however, that neither access to a PC nor access to the Internet posed a serious problem to our students. This is partly the result of the large-scale technical development programme that has taken place at the institution recently, and partly of changing individual demands and needs.

In terms of learning motivation, we also measured a positive result at both groups of students. During the semester both the undergraduate day students and undergraduate correspondent students studying in the e-learning system demonstrated a higher degree of activity than their colleagues learning in the traditional system. A characteristic feature of the method applied is that it necessitates regular learning and offers an opportunity for continuous practising. The level of activity was measured by the frequency of students' dealing with the learning material. Students of e-learning usually dealt with the course material 1-3 times a week, whereas students learning in the traditional system, as they themselves reported, had only dealt with the material in periods directly preceding mid-term and end-term tests and examinations. It is therefore clear that students of e-learning were more active and, as a result of the didactic

concept of the distance learning system, they were also more motivated than their colleagues in the traditional system. It is aptly illustrated by the answers students provided in the questionnaries after they have finished the distance learning material. More than ninety per cent of the students declared their willingness to learn in this method rather than in the traditional method, if more such materials were available.

Our preliminary supposition that the use of multi-media distance learning materials makes the acquisition of the material more effective, was confirmed by the survey. The statistical calculations registered a significant difference between the two groups learning in different systems in favour of the students of e-learning ($p<0,001$). As the participants in the survey do not constitute a representative sample, the results are primarily related to the group of students concerned. It does not mean, however, that the results are entirely unusable for the indication of some long-term tendencies in the efficiency of learning.

Summary

All our research findings suggest that it is necessary to meet the new circumstances and challenges that arise in our days.

It is imperative to make use of the potentials offered by IT, as these provide us with the opportunity of preserving the competitiveness of our education system.

These are the ultimate goals to which our research programmes into distance learning and individual learning described above are subordinated. In this way we wish to promote life-long learning and to offer an alternative way of learning tailored to individual needs more flexibly than before.

I believe that this new, dynamic method, still in the phase of development, may be a good added value, increasing the efficiency of long standing, well proved ways of learning in our education system.

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NOTES

Notes, Chapter 1:

A questionnaire survey has been conducted in order to chart the demands and expectations of students. Every student received the questionnaire through the standard administration system of the College (NEPTUN). 60% of the students returned the questionnaries (8,351 completed documents). The questionnaire contained the list of electable subject majors (30 items), from which students were requested to choose 9, and put them in a priority order. Then the two college faculties in charge of the subject majors, at their council meetings discussed and specified the courses to be launched.

After the decisions of the faculty councils, the translation and adaption of the course materials commenced, and the system of accessibility was installed. (Some of the course materials have not been developed at the College of Nyíregyháza; they have been produced at two Canadian institutions: Concordia University and JEDlet New Media).

Notes, Chapter 2:

The education-strategic research projects conducted at the European Union were the "Delphi"-programme and the so-called "weak signal"-research (2004). The projects summed up the opinions of the education politicians (Delphi-programme), and used the result of large-scale public opinion surveys (weak signal project).

The educational development strategies for the period 2005-15 have been based upon the results of the two surveys. For higher education, the new strategy includes the following:

- Education and training will be increasingly pluralistic, increasingly taking into account individual needs. The **individual will be responsible for acquiring the skills and competences they need**. The responsibility *of the state will be providing the chance and framework through* a varied and wide choice of subject majors and course materials. It will be made possible through the system of electable and complementary subjects and courses within the BSs és MSc training.

- It is expected and necessary to integrate training systems in various ways. Institutions of higher education should undertake the perspective of **lifelong learning**. It means that study opportunities and learning materials will multiply. It especially applies to the **web-based training courses**, *that are able to generate and develop value-added services such as consulting, tutoring and mentoring.*

SUPPLEMENTS

Supplement 1:

Dear Student,

Your name, as a user of the e-learning materials of the institution, has been randomly selected from the standard administration system of the College of Nyíregyháza.
The instructors and course material developers of the Virtual Campus make efforts to better serve the needs of the users, so they request you to complete and return a questionnaire, containing your ideas of the training.
If you agree to our anonymous use of your opinion for the increase of the efficiency of our work, please send us an e-mail and we will soon send you the questionnaire.

Thank you for your cooperation,
faithfully,

the organizers: Dr. Ágnes Kokovay, Andrea Kakuk

Supplement 2:

Dear Participant,

Below please enter the **code** that you received upon registering for the experiment. This code helps us in identifying you and processing the answers given to the tests and questionnaires.
The data received will be handled confidentially and will only be used for the purposes of the experiment in distance learning.
Code: ……..

At the questions please underline the text(s), circle, tick or complement as appropriate!

1. Your age……..

2. At what age did you first use a computer?.....

3. Where did you first use a computer? Home school elsewhere:……

If school, class study club
elsewhere:…….

4. Do you have a computer of your own? yes no

5. Is your computer connected to the Internet?
yes no

6. If yeas, what type is your access? UPC dial-in
(please choose at both sub-points)
unlimited limited

7. If you have no computer at home, where do you use one:
library
students hostel
at a college department:……
other place:……..

8. Do you regularly use the computer? Yes no

a) If yes, how frequently?: daily
weekly
irregularly
or:……

b) If daily, how many hours a day? …….

At usually what part of the day? ……..

c) If weekly, how frequently:

1x 2x 3x changing other:

……

d) If you do not use it regularly,

how long a time do you spend at the machine on one occassion?
……..

Which part of the day?
……

9. What do you use the computer for (several answers possible):

work
study
surfing the Internet
playing games
other, please specify:
……..

a) If you work on the computer, what kind of work do you do?
…..……

How much of the time you spend using the computer is work?
Whole half quarter or: ……

b) If you play games, what kinds of games do you play?
……..

How much of the time you spend using the computer is playing?

Whole half quarter or:……

c) How much of the time you spend using the computer is using the Internet?

Whole half quarter or:……

You use the Internet for: entertainment
study
chat
research
or:…….

How much time do you spend with the following activities:

entertainment:……
study:…….
chat:……..
research:…….
or:……

10. During the semester, how frequently did you deal with e-learning subject ……..….? (please enter the subject you study)

Regularly: daily
weely: 1x 2x 3x or:……
monthly: several times:……
only a few times
other frequency:……..
Irregularly: occasionally

just before tests or exams
other frequency:…….
For how long at a time:……

11. How do you evaluate the e-learning subject you study? (please give a grade)

(very poor) 1 2 3 4 5 (excellent)

12. Please give your reasons!

13. How do you evaluate the new method–please evaluate regardless of the particular subject major you study! (please give a grade)

(very poor) 1 2 3 4 5 (excellent)

Thank you for your cooperation,
faithfully,

Dr. Ágnes Kokovay, Andrea Kakuk

STUDIA UNIVERSITATIS BABEŞ-BOLYAI, EDUCATIO ARTIS GYMNASTICAE, LIV, 2, 2009

FOOD ROLE IN SPORTS PERFORMANCE

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ABSTRACT. At young age, nutrition has major roles in biological development. Sports performance is specific to this age. Brings health, trophies, printing discipline, concentration. These issues involve, intrinsic, sustained physical efforts of different degrees, depending on the specific evidence of competition. Therefore, to face the best, without being affected health, athletes should benefit from a diet adapted to caloric and nutritional energy expenditure, plus the special needs of their age. Food athletes performance was rather incomplete set of specialized literature, not a research objective rather exploited.

Keywords: nutrition, sports performance, dietary, diet

REZUMAT. Rolul alimentației în sportul de performanță. La vârsta tânără, alimentația are roluri majore în dezvoltarea biologică. Sportul de performanță este specific acestei vârste. Aduce sănătate, trofee, imprimă disciplină, concentrare, autocunoaştere. Aceste aspecte presupun, intrinsec, eforturi fizice susținute, de diferite grade, în funcție de specificul probelor de concurs. De aceea, pentru a face față optim, fără a fi afectată starea de sănătate, sportivul trebuie să beneficieze de o alimentație adaptată caloric şi nutritiv la cheltuielile sale energetice, plus nevoile speciale ale vârstei. Alimentația sportivilor de performanță a fost destul de incomplet prezentată în literatură de specialitate, nefiind un obiectiv de cercetare destul de exploatat.

Cuvinte cheie: alimentație, sport de performanță, regim alimentar, dietetică

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GENERAL CONSIDERATIONS

Food athletes since ancient times was quite different from the man in the street, keep athletes before a competition regime, but today has gone up as there are indications that food should vary depending on the sport practiced. It has a high interest both in Romania and abroad. In the field it appeared books and articles that set targets that should make a diet optimized. Great performers know now what to eat, they choose their quality and quantity because they were educated at the big competitions, but must take account of the objectives you need to achieve a diet studied by large specialists.

These objectives could help to shift the composition of regimes:

- must be done strictly for the person concerned: those "collective" the whole team can work periods of up to 30 days, and then requiring (individual adjustment) of nutrition;
- be easy to follow - do not require special effort to purchase;
- to maintain health.

Aims to achieve a healthy diet:

- energy supplied to approach as much as the body needs for a reasonable period of time - it is difficult to achieve but not impossible, requiring periodic adjustments, the result being optimal weight maintenance;
- the need to ensure an effortless balance between the principles of food: carbohydrates - proteins - lipids.
- the need to provide a balance between foods of plant and animal;
- there must be a balance between the various groups of food - even if not all nutrition(doctores) longer agree with this statement;

In other specialized books (eg, Sports Medicine, I. Dragan, 2002) and may identify other arrangements for food to athletes:

* support biological
* health promotion and increased sports performance
* cover the energy needs proper sports extra effort everyday activities

As is well known to sports nutrition effects added plastic (forming), which provides biological support, covering the energy needs associated with sporting effort, energy expenditure in different types of sport effort during which helps in making an adequate food ration.

To race in athletics, is expected following consumption kcal: 100 = 35 m, 70 = 200m, 100 = 400m, 800 = 130 m, 170= 1500 m, 230=3000m, 470 = 5000m, 750 = 10,000 m; 5 km march = 250 10 = 600 km march, 2300=march 50 km; marathon = 2500. Row = 10 to kcal / min. 1 football game = 1500, a game of basketball = 900, a game of volleyball = 10 kcal / min.; Battles 8. 5 -9. 5 kcal / min, 200 kcal in box 9 min. (Sports Medicine, I. Dragan, 2002)

Ministry of Health established a few years ago some of the rules on caloric ration depending on the nature, duration and intensity of professional effort, as heavy physical activity for 300-500 kcal/hour, very heavy physical activity over 500 kcal/hour. Athletes performance closer to heavy recruitment efforts and very heavy. In practice using a different assessment: 60-70 kcal/kg/24h.

These features require that food hygiene standards are complied with rational more strict diet in athletes than in other cases.

What food should take an athlete to have an optimal? It is a question as old as the history of sports competitions. Diet is a concern and a topic discussed at the first Olympic Games. In surprisingly many of the war then, and are currently listed: food crop amount of protein in the diet, intake of liquids.

Currently, there are discussions about the optimal form of a sport which is obtained from a wide range of training, but the factors that might alter its physical condition, one of whom daily diet.

The importance of clear diet and incidence of athletes on their return, made it to bear the name „invisible treatment". There are currently various polemics on the need to meet a specific diet and supplements with certain specific nutrients. Nowadays the most accepted theory is that a well balanced diet along with exercise is essential to obtain remarkable results.

A diet adequate athletes should cover the whole body needs, and contain 10-15% protein, 30-35% fat and 55-60% carbohydrate, sufficient water and energy drinks, nutritional supplements administered in relation to the effort by athletes.

Food came to the present problem undertake study in this fight for research on the factors directly responsible such as coaches, technical directors or managers and other individuals and industries without which modern sport basically could not exist : doctors, biologists, physiological.

All these go a colossal job to learn about sports physiology, to improve the qualities of athletes and individuals seeking to know the limits of good performance. (A. Bichescu, 2002)

It's good to know that nutrition is the essential, that physical education and sport to develop all their possibilities.

In this way developed a real history of food, along with the development of sport and issuing some principles became sports dietetics. Dietetics sports industry is a vast hygiene and studying various ways to supply the body for removing performance becomes higher.

Dietary applied in sport are very important, bringing her contribution to the preparation and biological athletes reach to the conclusion that from a perfect balance, due to good hygiene and general supervision of regular food hygiene contributes greatly to avoid of failure in performance.

Concerns for a sensible diet in the current stage of development of the sport are very old. Experts who have dealt and deal with this urgent problem formulated very precisely the following ideas:"no system of training will not give complete results, if those that apply will not take account of the hygiene conditions, like food, sleep, massage, etc.. "

Team sports as football, basketball, handball and included in physical activity, requiring a special diet for competition. However not all coaches and even players have not wont to give too much importance to food, although "the road to success in sport and passes through the digestive system" mistake that could influence negatively the athletes.

This issue has come to be so deeply discussed and studied, that has come to be realized in different food ration to the period of preparation, the competition, match day, where we can find the recommended intake before the game after the break and play and during the transition period.

Team sports are characterized by efforts to speed and resistance of high intensity, with a permanent nervous tension. Because of these characteristics are involved in a greater whole-body muscles, nervous system, circulatory and sensory apparatus.

Exhausted can not be stopped only by replacement or recovery of a food. Management of nutrition in food ration presents special issues. Since some studies show that diet for 24 hours should be sufficient, varied, on average ration to be 3500 cal. daily to ensure a balance between weight and effort, and the food be distributed as follows: 15% protein, 30% fat and 55% carbohydrates. (A. Bichescu, 2002)

This diet will include 1500 gr. liquid and spread them all three meals: morning, noon and night. Caloric intake should be determined depending on the intensity and effort. It is necessary for compliance with requirements for athletes nutrition:

- to match the quality and quantity;
- the daily ration to be exaggerated, give feeling saturated and contain easily digestible foods;
- food hygiene standards to meet;
- ration to meet the needs of the purposes and reserves to cover substances consumed in training and competition;
- the energy value of food is determined according to the daily consumption of energy;
- intake must meet needs for minerals and vitamins necessary body.
- in a food ration should be given all the food, namely: protein (meat, cheese), carbohydrates (bread, vegetables, sugars), fats (butter and oils), mineral salts and vitamins (vegetables, mineral water and other food)

Food can vary depending on the training and in terms of sharing quantity on the three meals, that 25% of the total ration to be served morning, noon at 40% and 35% at the evening meal.

After numerous studies conducted by specialists in the country and abroad, balanced diet for athletes, called the diet of training, no different from that recommended for the rest of the population in general, covering the quantitative and qualitative needs of the persons concerned, but should be maintain the nutrient balance of the total calorie: protein 10-15% fat 30-35%, 55-60% carbohydrates.

Finally a sports diet today differ from that of a normal active person, with the difference that calorific needs of athletes are higher. Therefore take into account the quantities ingested daily to provide adequate energy intake.

Diet prior to competition is an important part of the program of a sports nutrition. When preparing a sample for sports you need a proper diet for the long period of preparation that the body energy reserves to be found in an optimal state. While competition is a little more difficult because some sports do not allow eating during competition (sports being short), but long-term sports athletes is obliged to supply during the competition. Food ration

aims to replace materials used by the expenditure of energy, and can be set to correspond to expectations:
- should be easily digestible
- be practical consumable
- to present in a volume that does not bother

During and after the competitive effort is recommended to take account of the following food and drink:

Food and beverages recommended	Their
In practice pasta, rice, mashed potatoes, vegetables proaspede, fruit and honey, milk, water and fruit juice sweetened	Create reserve indispensable effort
Competition meat or eggs, fruit, cheeses, fruit juices, coffee, milk, eggs, tea, fish	Stimulation rate by stimulating the nervous system processes
After effort pasta, rice, green vegetables, fruit, butter, oils, cheese, potatoes, vegetable bullion salty, alkaline drinks, hot beverages	Restore reserves organic desintoxicate body, recover the loss of fluid

The coach and doctor will advise athletes in this respect, because each sport and each sport even special conditions.

Portion of the recovery effort after the body is very important and therefore should be thought, a restorative diet to eliminate lead as quickly as possible toxins that grevează tired body.

In literature and in the opinion of specialists, confirmed with the laws dieteticii sports, the recovery should be achieved by certain rules:
- immediately after the contest lukewarm water and mineral salt;
- for 24 hours a vegetarian regimen that will allow the body to fight against acidosis and eliminate toxins from the body;
- a second day regimen rich in protein;
- a third day will resume regular exercise nutrition.

Between eating without restraint and without inspection and those heroic era of sports, there is an area average, right where athletes aware of the importance of nutrition, will find, of course, "its way to eat balanced and pleasant" (Ministry of Youth and Sports-2002)

Table nr. 1.

Name Product	Protein	Carbohydrate	Lipids	Total Calories
milk	3,5	4,9	2,5	58
mheese	17	1	17,2	226
cheese cow	17	4	1,1	97
beef cow	21	-	3,5	118
pork	20,4	-	6,3	143
poultry	10,4	2,5	2,6	69
meat preparations	18,4	-	26,7	324
egg	14	0,6	12	171
fry fen	25,2	-	15,8	250
potatoes	2,1	19,1	0,2	89
aubergines	0,7	3,3	0,1	18
carotes	0,6	6,3	0,2	30
red	1,1	4,6	0,2	25
bread	8,3	52,2	0,8	255
pasta	9,6	75	1	300
biscuits	8,2	74	9,5	337
rice	7,6	75,8	1	351
butter	8	2,5	66	806
cream	3,5	3,1	20	213
oil	-	-	99,9	920
suger	-	99,9	-	410
hony	0,4	81,3	-	335
gem	-	73	-	302
apples	0,3	16,9	0,4	74
pears	0,2	9,6	-	34
apricots	0,7	8,4	-	31
grapes	2,	18,5	1,7	100
oranges	0,8	10,1	0,2	47
chocolate	3,2	48,6	28,9	481

CONCLUSIONS

After all the above, it will conclude that the athletes are eating right determinant factors in increasing efficiency. An inadequate diet lead to too long of a reduction of fatigue and potential labor athletes. This also can cause disturbances of health which could halt further prepare athletes and ultimately lead to achieving the desired results deuce. In general, performance in sports can not provide maximum performance if you do not take into account that athletes have adequate food needs.

Respect for human personality should be found, specifically, in all matters of man and especially in the diet, key point of a sound health.

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