Fitness for Youth

Methodical manual for trainers

Contents

Introduction

The Czech Ministry of Education, Youth and Sports ' Youth Report shows that only a quarter of young people (15-30 years) in the Czech Republic are actively involved in sports clubs (the EU average is 34 percent). Studies in Bulgaria show that problems at the national level are even more serious. Such research for Turkey is lacking. According to the results of the New Eurobarometer on sport and physical activity, 46 percent of the EU population never sports.

Our goal is to strengthen young people's opportunities and their own potential for active leisure spending through sport fitness activities. Through an international exchange of best practices and experience, the project aims to create opportunities for free online youth education and to provide a tool for youth workers to enhance this potential. The problem this project seeks to reduce is the abuse of anabolic steroids, which according to NMS reaches 5.4 percent. The project aims to meet the needs of young people, focusing on the development of youth's physical activities with emphasis on fitness, the prevention of pathological social phenomena, the prevention of anabolic steroid abuse, the strengthening of critical thinking in connection with fitness lifestyle, the prevention of health damage through the incorrect technique of fitness activities, the invitation The project includes 18 outgoing LTTA participants and 6 outgoing accompanying persons and local participants, 18 outgoing transnational meeting participants and local participants. The project also involves 2,000 participants in online educational activities and 300 participants in face-to-face educational activities. They will be selected from youth based on their interest in sports fitness activities. Within five years from the end of the project, educational activities will take place in all partner countries for at least 300 project target group members. There will be three LTTAs focusing on the project goals described above and three transnational meetings. The project's goals will be achieved by realizing the following partial outputs, continuously generated by a team of experts including youth professionals, fitness professionals and fitness sportsmen with the appropriate implementation of partial tasks in LTTAs and transnational meetings. These will be primarily a structured set of free online educational materials including educational videos, a methodological guide for trainers that takes into account the involvement of disadvantaged young people in fitness activities, recommendations for European and Turkish non-profit organizations active in the field of sport to increase the motivation of the target group to seek fitness. The project will have an impact on LTTA participants in new

knowledge and/or skills of participants in motivational incentives to engage in sporting activities, motivating youth to perform sporting activities, the dangers of using anabolic steroids, integrating disadvantaged youth into fitness activities, injury prevention and healthy sports nutrition. Participants will develop the ability to communicate in English, interpersonal communication, define themselves against prejudice, racism and xenophobia, use the European Youth Pass and Europass passports. The project will impact participants in transnational meetings by developing their IT skills, professional / scientific, dissemination, and organizational skills. The project will have an impact on partner organizations through their intensive involvement in non-profit international networks, the development of co-workers' expert knowledge and skills, and the development of their project management skills. Europe for you, z.s. develops a sustainability plan for key project outputs. All processed outputs will be available online free of charge at least 5 years after the end of the project. The project will be useful in the long run by opening free online fitness education for European youth, providing training in fitness activities and for disadvantaged youth through a published methodological guide in English, improving the quality and involvement of young people in sporting activities by drawing up recommendations for European and Turkish non-profit organizations active in sporting activities.

Ours goals

1. A structured set of free educational materials (from Champions Factory) containing educational videos (led by Europe for you, z.s.) and developing youth critical thinking about sport fitness activities-continuous creation by a team of professionals including professionals, fitness professionals and youth fitness instructors with appropriate implementation.

2. Methodical manual for trainers taking into account the involvement of disadvantaged youth in fitness activities-continuous creation by a team of experts including professionals, fitness professionals and youth fitness instructors (photographic material) with the appropriate implementation of partial work in LTTAs and transnational meetings.

3. Recommendations for European and Turkish non-profit organizations (under the leadership of SULTANGAZ OLMPK SPOR KULÜBÜ DERNE) active in the field of sport to increase the motivation of the target group to self-initiate the search for fitness activities and to learn the correct techniques for their implementation and to learn about healthy lifestyle-professionals including fitness professionals.

4. Educational activities for at least 300 project target group members in all partner countries — organization of face-to-face and online educational activities with demonstrable involvement of

at least 300 target group members (number of visitors attending activities, number of visits to educational videos, number of visits and responses to the project's web or FB pages)

5. Project website— Developed by experts working with Europe for you, z.s., materials will be uploaded by a Turkish partner

6. FB Project Page — Create members of Europe for you, z.s. The responsible person is the chairman of the association right at the beginning of the project, the materials will be continuously uploaded by the Turkish partner

7. Popularization of European tools Youthpass and Europass Language passport— creation during / after return from LTTAs and transnational meetings of team members of partner organizations and outgoing participants

8. Certificate of Participation for Outbound Participants in Project Activities Abroad-Provided by Host Organization

9. Project implementation course documentation-publishing on the project's web and Facebook pages (LTTA photographs, videos, processed materials, programs and protocols, Erasmus + Project Results Platform)

10. Presentation of partner organizations

Find out more on our:

- Website http://www.fitnessforyouth.eu/
- Facebook https://www.facebook.com/FitnessForYouth/
- Youtube channel https://www.youtube.com/channel/UCMmoWc569Pc9j0NSnzzUFHA

Motivation

1. What about the motives, goals and the motivation?

Motivation is an internal energy force which affects all aspects of our conduct, and it also affects the manner in which we think, feel and interact. High motivation in sport is widely accepted as a prerequisite for getting athletes to realize their potential. Given its inherently abstract nature, however, it is a force that is often difficult to fully exploit. The concept "motivation" comes from the term "motiv." Motivation can be defined as an inner state of mind that activates and directs our conduct. It causes us to act. It's always inside and outsourced through our behaviour. Motivation is the willingness to make efforts to achieve his / her goal.

Fred Luthans defined the motivation as "a process that begins with a lack of physiology or psychology or needs that activates conduct or drive towards a goal or stimulus.'

According to Stephen P. Robbins, "motivation is the willingness to exert a high degree of effort towards organizational goals, conditioned by the ability to meet certain individual needs."

Nearly every human behavior is motivated. Growing hair does not require motivation, but getting a hair cut does. Motives are prompting people to act. These are therefore at the very heart of the process of motivation. Motives provide an active impulse to achieve a goal. Examples of food and water needs are translated into the drives or motives of hunger and thrust. Likewise, the need for friends becomes an affiliation motive.

In general, motives are aimed at goals. Motives generally create an imbalance in physiology or psychology. Achieving goals restores equilibrium. For example, there is a goal when the man's body is deprived of food or water or when friends or companions are deprived of his personality.

Components of motivation

Anyone who has ever achieved a goal probably realizes immediately that it's not enough to simply want to achieve something. Achieving such a goal requires the ability to keep going despite difficulties through obstacles and endurance. Motivation has three main components: activation, persistence, and intensity. Activation involves the decision to start a behavior such as starting fitness classes.

Persistence is an attempt to achieve the goal, although there may be obstacles. An example of persistence would be to spend more time for fitness in the week, though it would cost more time and money. The intensity can be seen in the concentration and vigor with which the goal is pursued. For example, an athlete might spend more time in the gym while another goes to the gym periodically, interested in the impact of different eating regimes, and seeks advices from

instructors how to improve his personal performance. The first athlete is definitely lacking in intensity while the second pursues his goals with a high intensity.

Types of motivation

Motivation is the key to success. It gives passion, joy when goals are achieved, and in the face of failure gives optimism. Self-motivated leaders tend to look at energy and persistence as their goals. Strong drive, clear visions and a strong commitment to organizations are all the hallmarks of a self-motivating leader. Self-motivated leaders raise the performance bar for all time and compete with their peers and not just themselves.

Intrinsic motivation

This is when "internal" motivation comes to satisfy personal requirements. We do things that we do, not because we have to, but because we enjoy them. In fact, you can be motivated internally when enjoying the fact that you increase your educational knowledge, develop your skills or are interested in a certain field. Examples include exploring opportunities to develop your personal skills to fulfill your task or to establish the standards to become a role model or mentor. Whatever you take on yourself, you do it to achieve it and satisfy yourself.

Extrinsic motivation

Motivation comes from "external" factors, which others give or control. Wages or praise are examples for that. This kind of motivation is common and common in society. You are extrinsically motivated when you are motivated to do, achieve, learn or do something based on a highly regarded result instead of for fun, development or personal accomplishment.

Motivational techniques for coaches and athletes

Goal setting

Athletes should be encouraged to set some ambitious but achievable long-term goals. They are more likely to accept the challenges that lie ahead and pursue the goals with enthusiasm by set their own goals. They should also set appropriate medium-term goals in order to keep athletes on track with their long-term goals. Therefore, short-term goals should be predominantly process-oriented. Goals must be regularly monitored and revised. One of the biggest mistakes coaches make in setting goals is that their approach is often too rigid.

Using extrinsic rewards

The key aspect in the effective use of extrinsic rewards is to reinforce the athlete's sense of competence and self-worth. Therefore, rather than controlling, a reward should be informational in nature. Care should also be taken with the use of external motivators, as they may undermine internal motivation. To be informational about a reward, it is advisable that it has relatively little

monetary value (i.e. it is a token reward), such as the title of a "player of the match." The reward should also be presented to an athlete with some emphasis on the prestige associated with it in front of all potential recipients. Other popular ways to use token rewards include the names of athletes on annual boards of honors.

Motivational music

A particularly good way to motivate athletes is through the use of music they perceive to be inspirational in training and before the competition. If you noticed, in many fitness centers sounds music, that works to inspire people as they train in the halls. Brunel University research suggests that this approach increases work output, reduces perceived exertion, and improves the effect on the task–the pleasure experienced during the activity.

Positive self-talk

Positive self-talk is a technique that can be used to increase motivation across a variety of fields of achievement. It uses the powerful inner voice of an athlete to strengthen their self-esteem or important performance aspects. Self-talk can change the belief system of an athlete positively with appropriate repetition.

SUMMARY

Each of us has an untapped source of energy which can be drawn to produce superior outcomes. Improving motivation basically involves changing attitudes, developing a positive "can do" attitude, and engaging in systematic behaviors–the goals of the short-term process–that facilitate improvement. You will have considerable influence on how motivated your athletes or team might feel if you have a leadership role in sport. A good work ethic can be established, individual efforts recognized and the structure of transparent rewards that strengthen human skills. The techniques for motivation should be modeled on specific circumstances and individual needs to work best.

Meaning of critical thinking

Ennis defined critical thinking as "reasonable and reflective thinking that focuses on deciding what to believe to do" (Ennis 1987, p.10). Beyer views critical thinking as an evaluative skill that allows an individual to assess information in order to make a judgment on its validity, value, or accuracy. Both Ennis and Beyer claim that critical thinking also involves a systematic process of approaching, evaluating, and thinking through a problem or challenge.

Critical thinking is that the ability to think clearly and rationally regarding what to try or what to believe. It includes the flexibility to have interaction in reflective and freelance thinking. Critical thinking is not a matter of accumulating information. A person with a good memory and who knows a lot of facts is not necessarily good at critical thinking. A critical thinker is able to deduce consequences from what he knows, and he knows how to make use of information to solve problems, and to seek relevant sources of information to inform himself. Critical thinking should not be confused with being argumentative or being critical of other people. Although critical thinking skills can be used in exposing fallacies and bad reasoning, critical thinking can also play an important role in cooperative reasoning and constructive tasks. Critical thinking can help us acquire knowledge, improve our theories, and strengthen arguments. We can use critical thinking to enhance work processes and improve social institutions. Some people believe that critical thinking hinders creativity because it requires following the rules of logic and rationality, but creativity may require violating rules. Critical thinking is quite compatible with "out of the box" thinking, challenging consensus and pursuing less popular approaches. If anything, critical thinking is an essential part of creativity because we need critical thinking to evaluate and enhance our creative ideas.

The way we think can be divided into three different levels of cognition. The first level is made up of basic thinking skills or functional skills that we develop with our parents' interaction from the time of our birth to the time we start school. The second level of cognition is made up of procedural skills that we develop in school such as reading and writing. These skills are dependent of the efficient development of the functional skills. The final level of cognition is the conceptual level of thinking, where we combine ideas into concepts that gives us our beliefs about ourselves and the world. This level of cognition is directly impacted by the efficiency of the functional skills as well. Inefficiencies in the basic thinking skills impacts our effectiveness in every facet of life, including sports.

The importance of critical thinking

Critical thinking is a general thinking skill in the domain. Whatever we choose to do, the ability to think clearly and rationally is important. If you work in education, research, finance, management, or the legal profession, critical thinking is obviously important. But critical thinking skills are not limited to a particular subject area. Being able to think well and systematically solve problems is an asset for any career. Critical thinking is very important for the new knowledge economy. Information and technology are the driving force behind the global knowledge economy. You have to be able to deal with changes quickly and effectively. The new economy places increasing demands on flexible intellectual skills and the ability to analyze information and integrate various sources of knowledge in problem solving. Good critical thinking promotes such thinking abilities and is very important in the rapidly changing workplace.

Critical thinking enhances the skills of language and presentation. Clear and systematic thinking can improve the way we express our ideas. Critical thinking also improves comprehension skills in learning how to analyze the logical structure of texts. The critical thinking promotes creativity. Developing a creative solution to a problem involves not only having new ideas. It must also be the case that the new ideas being generated are useful and relevant for the task at hand. Critical thinking plays a crucial role in assessing new ideas, selecting the best ones and modifying them if necessary Critical thinking is crucial to self-reflection. We need to justify and reflect on our values and decisions in order to live a meaningful life and structure our lives accordingly. Critical thinking provides the tools for the self-evaluation process. Good critical thinking is the basis of science and democracy. Science requires the critical use of reason in experimentation and confirmation of theory. A liberal democracy's proper functioning requires citizens who can think critically about social issues to inform their judgments about proper governance and overcome biases and prejudice.

CRITICAL THINKING IN SPORT

It is generally agreed that a very important part of the game is the mental part of any sporting activity. Good thinking skills help from just beginning to the professional level at any level of sport. At the college level, however, and especially at the professional level, it is even more important because the physical abilities between athletes are often very minor and it is the way athletes think and use good judgment that will make the biggest differences. In fact, the better your mental abilities are, the better your physical abilities. How you think can have a profound effect on maximizing your physical abilities at a very basic level.

Some of the basic thinking skills that have a direct impact on sports are form recognition, direction and orientation, classification and categorization, environmental acuity, field

discrimination, analysis and synthesis, pattern recognition, abstract sequencing, motor integration, and others. If any of these skills are inefficient, it could have a big impact on the performance of an athlete. How well we recognize things, how well we process them, how well we strategize and how well we execute has everything to do with the efficiency or inefficiency of these cognitive basic or functional abilities. Critical thinking may be adapted to the physical domain in two ways. The first of these involves taking advantage of opportunities that are already present in the teaching area and the second involves making use of the various strategies available to us through critical thinlung. While there are many opportunities for students and athletes to apply the four broad areas of critical thinking to the psycho-motor domain, the challenge is learning to recognize when these opportunities become available. The teacher/coach must be able to recognize those situations in which students can apply critical thinking, assist those students/ athletes through the critical thinking process(es), and then must follow up on this process by asking the students questions that prompt critical thought.

Secondary teachers and coaches can also challenge their students/ athletes to think critically by providing opportunities for creative and independent problem solving. Opportunities exist in the sporting arena, such as allowing learners to think out a strategic plan or having them create a unique movement solution. Such strategies can be included in sport, fitness, and extra-curricular activities.

CONCLUSION

Critical thinking has a place in the psycho-motor domain. Physical education and sport environments can provide individuals with a supportive environment to learn how to think critically. The practical nature of physical activity allows the individual to apply a new strategy, attempt a new movement and evaluate the worth of the response almost immediately. Students can be challenged to produce unique solutions to movement problems, create new versions of a game, and think through issues related to fitness and health. However, both teachers / coaches and students must be able to recognize the opportunities available to apply and use critical thinking. But, as stated earlier, the challenge is to learn to recognize when these opportunities become available.

Regardless of the strategies taught or the activities involved, the teacher must be the facilitator of the critical thinking process. The teacher fosters the students ' ability to focus their attention on decisions that are necessary for skilled performance. Through this active role, the teacher will be able to assist the students in using critical thinking to achieve success in the areas of fitness and movement

Examples of Good Practice Exercises

Exercises

Back Workout

Wide grip pulldown

Wide-Grip Lat **Pulldown**. The **wide-grip** lat **pulldown** is an upper-body strength exercise and variation to the traditional **pulldown** that targets the back. The **wide-grip** position targets the outer lats, and reduces the resistance placed on the biceps and forearms

1. Reach up and grab the bar with each hand. Your thumbs should be pointing toward each other, and your grip should be wider than your body.
2. When positioned correctly, your arms and torso should form a 'Y.' To be more specific, each arm should be 30 to 45 degrees from your body, but no more than a 45-degree angle.
3. Look straight ahead and pull your body upwards towards the bar.
4. Pause, then lower yourself back down to the original position.

Underhand grip pull down

Since it is performed using a supinated or **underhand** grip, it places more emphasis on your forearms, biceps, triceps, and back **muscles** than other variations of **lat pulldowns**. While doing the exercise, the trapezius **muscles** compliment the shoulder **muscles** and help in improving stability in the lower back

Step 1. Sit on a bench facing an adjustable cable machine with a lat pulldown bar positioned on a high setting. With your back straight, grab the bar with an underhand grip, your arms fully extended and your hands shoulder-width apart.

Step 2. Pull your shoulder blades down and back, bringing the bar to your chest. Pause and then return to the starting position.

Cable row

The seated **cable row** is a pulling exercise that **works** the back **muscles** in general, particularly the latissimus dorsi. It also **works** the forearm **muscles** and the upper arm **muscles**, as the biceps and triceps are dynamic stabilizers for this exercise.

1. l the handle and weight back toward the lower abdomen while trying not to use the momentum of the row too much by moving the torso backward with the arms.
2. Target the middle to upper back by keeping your back straight and squeezing your shoulder blades together as you row, chest out.
3. Return the handle forward under tension to full stretch, remembering to keep that back straight even though flexed at the hips. Repeat the exercise for the desired number of repetitions.

One arm dumbell row

The main **muscle** group worked during the single-**arm row** is the latissimus dorsi (lats). You also engage the entire back, shoulders, and **arms** (the trapezius, rhomboids, teres major and minor, deltoids, infraspinatus, biceps, brachialis, brachioradialis, and even pecs).

1. Take one step back into a lunge position. Keep a soft bend in your front leg with the knee in line with your ankle and back leg straight. Lean slightly forward, and rest your free hand on your front thigh. Tighten your core by squeezing your belly button in towards your spine. This will give you a good base of support.
2. Lower the dumbbell toward the floor until you have a full extension at the elbow. Maintain proper posture through your shoulders, hips, and lower back. Avoid rounding or arching the lumbar spine.
3. Begin the upward motion of the dumbbell by first sliding your shoulder blade toward your spine and then lifting the weight up toward your torso by driving your elbow to the ceiling. Keep your elbow close to your body as it passes the ribs.
4. Squeeze your shoulder blade in toward the center of back (contracting the rhomboids). At the end of the movement, the dumbbell should be in line with your chest and your elbow should be pointing up toward the ceiling. Be sure to maintain good posture through your spine, shoulders, and hips.
5. Repeat for the appropriate number of repetitions.
6. Switch sides and repeat the same number of repetitions with the opposite arm.
7. Perform two to three sets of the exercise, with a one-minute rest between sets.

Bent barbell row

- The muscle groups worked during bent barbell row:
- Latissimus Dorsi (back)
- Posterior Shoulder, Rhomboids, Scapular Stabilizers.
- Forearms and Biceps (grip and some pulling)
- Spinal Erectors.
- Hamstrings and Glutes (positioning)

Biceps workout

Hammer curl

Hammer curls target the long head of the **biceps** as well as the brachialis and the brachioradialis (one of the forearm muscles). This movement also engages stabilizer muscles, including the anterior deltoid, the upper and middle trapezius, the extensor carpi radialis, and others

The hammer curl is a relatively simple exercise but requires a strict form. Otherwise, you're just wasting your time and putting yourself at risk for injury. Follow these steps to do hammer curls correctly:

- Stand up straight, with a dumbbell in each hand.
- Keep your palms facing your torso and your elbows close to the body.
- Curl the weight forward with your right arm while squeezing the biceps until your forearm is vertical.
- Make sure your upper arm stays still. Use your forearm to control the movement. Keep your elbow stationary.
- Hold for 1-2 seconds and then slowly lower the weight to the starting position.
- Repeat with your left arm.

Dumbbell curl

The bicep muscle plays a vital role in most sports and pulling movements. It also works with the lats, traps, delts, and triceps to allow your elbows and shoulders to function optimally. Therefore, it's essential to strengthen your biceps — and curls do a great job in that regard.

While it's true that compound movements like pull-ups and rows will give you more bang for your buck, bicep curls have their role.

First of all, this exercise is easy to learn and perform. It also allows for a wide range of variations, so you can always experiment with new movements and work your biceps from different angles. **Dumbbell curls are not your only option.**

In the long run, bicep curls can help increase shoulder stabilization and build arm strength. This can boost your athletic performance and reduce injury risk.

Here's how to do dumbbell bicep curls like a pro:

- Stand up straight with a dumbbell in each hand. Keep your arms straight, your palms facing in, and your elbows close to your torso.
- Exhale and curl the dumbbells up to your shoulders until your forearms are perpendicular to the floor. Squeeze your biceps and hold the contraction for 1-2 seconds.
- Inhale and lower the weight with a slow, controlled motion.
- Repeat.

Cable curl

Synergistic **muscles** worked during the **cable curl** are the brachialis and the brachioradialis, which are also used when flexing the elbow. While doing the **cable curl**, other stabilizing **muscles** come into play in the shoulder and upper back—the anterior deltoid, trapezius and the levator scapulae.

1. Stand comfortably with feet firmly placed on the floor.
2. Brace the abdominal muscles, straighten the back, keep the head steady.
3. Curl the cable weight upward toward the chest, breathing out. Only your forearms should move, rising up from the elbow.
4. Hold at the top of the contraction for one second.

5. Inhale and unbend the arms at the elbow to let the cable weight return the arms to the lower resting position. Stop before the weights return to the stack, keeping the cable under tension.
6. Complete the chosen number of repetitions (10 or 12 is a good number)

Overhand barbell curl

The **overhand** bicep **curl** is a form of **curling** that targets both the biceps and forearms. Your standard bicep **curl** uses an underhand grip, with your palms facing up. This movement feels natural both in concept and execution.

As stated above, they are *essentially* the same movement, with just a switch in grip.

This switch changes *how* the muscles in your arms are targeted, but you are still working your arms effectively.

I would suggest that overhand bicep curl will take more skill to properly perform with good form and control.

Whereas, the standard bicep curl is fairly easy to learn *and* perform — the only real limit is your strength level.

For the overhand bicep curl, your strength level, grip, and stabilization all play a **much** bigger role.

Chest Workout

Bench press

It is the staple exercise for building **muscle** mass and strength in the chest. The primary **muscles** that are **worked** in a **bench press** are the triceps brachii and pectoralis major with the anterior (front) deltoids, traps & back as secondary **muscles used** in the flat barbell **bench press**.

The person performing the exercise lies on their back on a bench with a barbell grasped in both hands. They lower the barbell to chest level, then press the barbell upwards, extending the arms until the elbows are locked out. This is one repetition (rep).

Incline dumbbell press

Incline Bench **Press Muscles** Worked
The **Incline** Bench **Press** primarily **works** the clavicular head of the pectoralis major, or the upper portion of your chest. It also **works** the anterior deltoid (front portion of the shoulder) and the triceps (backside of your arm)

Step 1: Lie on the incline bench and plant your feet on the floor with your butt about 6 inches above the seat. Now slide yourself down so your butt is on the seat without lifting your feet off the ground. Tighten your glutes and core. Learn more about this setup here.

Step 2: Grab the barbell with a grip slightly wider than shoulder width and hold onto it as tightly as you can. Unrack the bar and bring it directly over your shoulders with your arms straight. This is your starting position.

Step 3: Take a deep breath in and lower the bar with control to the upper part of your chest. Your elbows should be at about a 45-degree angle with your body.

Step 4: Drive your feet into the ground and explosively press the bar up to return to the starting position.

Peck deck

Pec deck flys **work** the pectoralis major **muscles** (i.e. the main, large chest **muscles**), to include both the sternal head (i.e. inner aspect) and the clavicular head (i.e. primarily the upper aspect of the

, but also the upper-outer aspect).

1. Adjust the seat so that when the handles are grasped your upper arms are parallel with the ground, i.e. the angle of your elbow joints is 90 degrees. Note that once you are seated and in position, your arms should be open with your elbows out to the sides; if not contraindicated (by previous injury or pain), it is preferable that the handles are set in such a position that your chest receives a stretch when in the extended starting position (with your elbows out and back).
2. Sit with your feet planted and grasp the handles (if handles are present). Your forearms should be pressed against the pads.
3. Squeeze your arms together, exhaling throughout the movement. Once your arms meet in front of your face, you may isometrically contract your chest muscles to ensure that full inner chest muscular recruitment is achieved.
4. Allow your arms to move apart and back, inhaling throughout the movement. Best outer chest muscular recruitment occurs when the weight pulls your arms all the way back, thus stretching your chest fully. Only allow such a stretch if it is comfortable to do so.
5. Repeat steps 3-4 for as many repetitions as are desired

Push ups

In the standard pushup, the following muscles are targeted:

- chest muscles, or pectorals.
- shoulders, or deltoids.
- back of your arms, or triceps.
- abdominals.
- the “wing” muscles directly under your armpit, called the serratus anterior.
- Start in a plank position with your pelvis tucked in, your neck neutral, and your palms directly under your shoulders. Make sure your shoulders are rotated back and down, too.

- As you brace your core and keep your back flat, begin to lower your body by bending your elbows while keeping them pointed slightly back. Lower down until your chest grazes the floor.
- Immediately extend your elbows and push your body back up to the starting position.
- Repeat for as many reps as possible, for 3 sets.

Core Workout

Plank

The **plank** strengthens the abdominals, back and shoulders. **Muscles** involved in the front **plank** include: Primary **muscles**: erector spinae, rectus abdominis (abs), and transverse abdominis.

1. Get into a tabletop position with your shoulders directly over your wrists and hips in line with your knees.
2. Engaging your abs, shoulders, back, and glutes, extend your legs back to straighten into a plank and hold.
3. If you can, do the exercise in front of a mirror, to check that your butt isn't raised. (A common mistake, but your body should be flat as opposed to an upside down-V shape.)

Ab wheel rollout

Accessory Stabilization Muscles
The ab wheel rollout is more than an ab **exercise**; it's a challenge to your hips, shoulders, triceps, and latissimus dorsi. These muscles stabilize your body from shoulder to tailbone while the wheel rolls in front of your body.

Start on both knees with the **ab wheel** just in front of the body on the floor. Tighten the core with arms fully extended and slowly **roll** the **wheel** forward until your body is parallel to the ground. Squeeze your core tight, without your back arching, and **roll** yourself back to the starting position and repeat

Abdominal crunch

Crunches or abdominal crunches work the **rectus abdominis muscle** in the midsection of your body. Ab curls may also engage the external or **internal oblique** muscles, especially when rotation is added to the movement. Abdominal crunches are an effective way to strengthen the front of your torso or core region of your body

To do a classic crunch, lie on your back, bend your knees and put your feet flat on the floor. Clasp your hands loosely behind your head. Relax your back against the floor. Now, slowly curl your shoulders up from the floor to a 30-degree angle (approximately). Make sure you don't pull up on your neck. Hold for a second and then lower. Repeat for two sets of 8 to 12 repetitions. As you get more fit, work up to three sets of 10 reps.

Form is especially important when you do a basic crunch exercise. But according to Sports Medicine expert Elizabeth Quinn, most people don't do crunches correctly. "Using good form when doing a crunch makes this a much more effective abdominal exercise," she says. "Proper technique not only impacts how effective the exercise is but doing crunches incorrectly can actually lead to back problems."

To keep your crunches in top form, remember these pointers:

- Always exhale as you contract (bend) and inhale as you release (go back to starting position) during the crunch.
- You should never pull on your neck when doing a crunch. If you can't clasp your hands behind your head, you can cross them over your chest instead.
- Always keep your chin off of your chest when doing a crunch. You can actually rest your fist under your chin to make sure that your chin doesn't drop too low.
- Move slowly and continuously as you do the crunch.

Abdominal reverse crunch

Reverse Crunches work all of the **muscle**, with extra emphasis on the lower region. Secondary **muscles** include the obliques, which are the **muscles** on either side of the rectus abdominis, and the tranverse abdominis, the deepest of all abdominal **muscles** whose functions include stabilizing the spine and core.

Setup: Lie back on a bench with your thighs perpendicular to the ground. Place a foam roller between your hamstrings and calves and squeeze the roller. Place your hands over your head and grab the edge of the bench.

Action: Forcefully contract your abs to lift your butt off the bench and your knees up above your chest. Hold this position for one or two seconds with a maximal ab contraction. Slowly lower back to the starting position until your butt is on the bench and your thighs are perpendicular to the ground. See the below pictures for a step-by-step guide:

• Drive your calves into the foam roller as hard as you can.
• To properly target your abs, lift your knees up toward the ceiling before bringing them in.
• Perform each rep slowly.
• To protect your back, do not let your knees go beyond perpendicular.

Sets/Reps: 3x10-12

Legs Workout

Squat

A **squat** is a strength exercise in which the trainee lowers their hips from a standing position and then stands back up. During the descent of a squat, the hip and knee joints flex while the ankle joint dorsiflexes; conversely the hip and knee joints extend and the ankle joint plantarflexes when standing up.

How to Do a Squat

1. Stand straight with feet hip-width apart. Stand with your feet apart, directly under your hips, and place your hands on your hips.

2. Tighten your stomach muscles.
3. Lower down, as if sitting.
4. Straighten your legs.
5. Repeat the movement.

Deadlift

Deadlift is the only exercise that stimulates both the lower and upper **body**. The same cannot be said of squats. **Deadlifts work** the butt, upper thighs, hamstrings, lower back, upper middle back and traps.

Here's how to Deadlift with proper form:

1. Stand with your mid-foot under the barbell.
2. Bend over and grab the bar with a shoulder-width grip.
3. Bend your knees until your shins touch the bar.
4. Lift your chest up and straighten your lower back.
5. Take a big breath, hold it, and stand up with the weight.

Lunges

Both forward **lunges** and **rear lunges** target the same **muscles** in your thighs, buttocks and calves. The primary **muscles** targeted are the quadriceps in the front of your thigh, the gluteus maximus in your buttocks, the adductor magnus in your inner thigh and the soleus in your calf.

Know Your Basics: How to Do a Lunge

1. Keep your upper body straight, with your shoulders back and relaxed and chin up (pick a point to stare at in front of you so you don't keep looking down). Always engage your core.
2. Step forward with one leg, lowering your hips until both knees are bent at about a 90-degree angle.

Leg press

The **leg press** is a movement that targets the quadriceps. The glutes and hamstrings, while slightly active in this movement, are less **involved** than in a squat due to the limited amounts of hip flexion and extension while in the seated position.

How do you properly do a leg press?
Your torso and the **legs** should make a perfect 90-degree angle. This will be your starting position. As you inhale, slowly lower the platform until your upper and lower **legs** make a 90-degree angle. Pushing mainly with the heels of your feet and **using** the quadriceps go back to the starting position as you exhale.

Bulgarian split squat

Bulgarian split squats **work** the glute **muscles** as well as the upper leg **muscles**. The target **muscle** is the quadriceps with the gluteus maximus, soleus and adductor magnus **working** to assist. The hamstring, gastrocnemius, gluteus medius and gluteus minimus all act as stabilizers.

1. Start by standing about 2 feet in front of a knee-level bench or step.
2. Lift your right leg up behind you and place the top of your foot on the bench. Your feet should still be about shoulder-width apart, and your right foot should be far enough in front of the bench where you can comfortably lunge — hop around a bit so you can find the right spot. If a closer foot position works, just ensure that when you lower down, your left knee doesn't fall over the line of your toes.
3. While engaging your core, roll your shoulders back and lean slightly forward at the waist, beginning to lower down on your left leg, bending the knee.
4. If completing a quad-dominant Bulgarian split squat, stop before your knee falls over your toes. If completing a glute-dominant Bulgarian split squat, stop when your left thigh is parallel to the ground.
5. Push up through your left foot, using the power from your quads and hamstrings to return to standing.
6. Repeat for the desired number of reps on this leg, then switch, putting the left foot up on the bench.

Standing calf rise

Calf raises are a method of exercising the gastrocnemius, tibialis posterior and soleus **muscles** of the lower leg. The movement performed is plantar flexion, a.k.a. ankle extension.

1. Stand on the edge of a step.

Or, if you have a step-aerobics platform, place two sets of risers underneath the platform.

1. Stand tall with your abdominals pulled in, the balls of your feet firmly planted on the step, and your heels hanging over the edge.

Rest your hands against a wall or a sturdy object for balance.

1. Raise your heels a few inches above the edge of the step so that you're on your tiptoes.

2. Hold the position for a moment, and then lower your heels below the platform, feeling a stretch in your calf muscles.

Shoulders workout

Military press

The **military press** is one of the best exercises for developing almost every major muscle group in your body, including your shoulders, upper chest, triceps, and core, and even your glutes, biceps, and lats to a lesser degree.

1. The military press is one of the best exercises for developing almost every major muscle group in your body, including your shoulders, upper chest, triceps, and core, and even your glutes, biceps, and lats to a lesser degree.
2. Learning proper military press technique boils down to ingraining a few simple habits, and remembering a handful of effective cues (which you'll learn below).
3. The standing barbell military press is the most popular style, but the seated barbell and dumbbell military presses, push press, and dumbbell Arnold press are worth trying as well.

Barbell high pull

Though the **high pull works** primarily your upper body, because you're squatting, the **muscles** in your legs will also benefit. The **high** power **pull** strengthens the trapezius **muscles** as well as the hip adductor **muscles**, gluteal **muscles**, hamstrings, quadriceps and shoulders.

The high power pull is a technique that utilizes a barbell. Begin in a standing position with your feet under the bar. Your feet should be slightly wider than shoulder-width. Squat down over the bar so that your shoulders are directly over the bar and your back is arched. Grip the bar with straight arms. Straighten your legs and pull the bar up off the floor. Raise your shoulder and extend the body until you're on the balls of your feet. Pull the bar to your neck. Lower the bar slowly and bend your knees on the return.

Dumbbell lateral raise

The prime movers in **dumbbell lateral raises** are your shoulders, or the deltoids. The shoulder **muscles** have three heads: anterior, medial and posterior. The anterior and medial head of the deltoid rest along the front and sides of your shoulders and are activated when you **raise** your arms.

The dumbbell lateral raise is performed from a standing or seated position. Hold a dumbbell in each hand with your arms straight at your sides. Turn palms to face your body. If standing, position your feet hip-distance apart. If seated, keep your back straight and your feet flat on the floor. Contract your stomach by pulling your navel toward your spine to provide core stability. Keep a slight bend in your elbow as you exhale and raise the dumbbells out to the sides. Lift until your arms are parallel with the floor. Inhale and slowly return to the starting position. As your strength progresses, your range of motion also improves. Change your starting position

and lean slightly forward from the waist. Position your hands in front of your legs and begin with your palms facing each other.

Dumbbell overhead press

Muscles at work during the overhead press

- pectorals (chest)
- deltoids (shoulders)
- triceps (arms)
- trapezius (upper back)
- Unrack the bar and step back. The bar should be resting in your hands right around your collarbone.
- To start the movement, brace your abs, squeeze your butt, tilt your head back, and drive the bar up toward the ceiling.
- Once the bar passes your forehead, return your head to neutral while locking your arms out overhead. At the top of the press, make sure your abs and glutes are still engaged and you're not bending your lower back.
- Slowly lower the bar back down to your shoulders, tilting your head back to make room.

Triceps workout

Dips

Triceps dips can also be performed using parallel dip bars, which are found in most gyms. Dip bars are sturdy, metal racks that support your body while you extend your arms and raise yourself until your feet are not touching the ground. The objective when using triceps dip bars is to lower and elevate your body without allowing your feet to reach the ground. This places the strong, opposing force of gravity in direct competition with your triceps muscles. As you advance, you can attach ankle weights or hold a small dumbbell with your feet as you raise and lower your body.

1.More advanced exercisers may want to take the bench or chair out of the equation entirely. Triceps dips can be performed on parallel bars at your gym or even on a playground.

2.You hold your entire body weight up with your arms extended and feet hovering over the floor, ankles crossed. Lower your body until your elbows reach a 90-degree angle before returning to your starting position.

Cable press down

Two of these **muscles**, the triceps brachii and anconeus, **are** positioned on the back of your upper arm. These **muscles are** attached to the ulna bone of your forearm and pull your arm straight if it is bent. This motion, called elbow extension, is what occurs when triceps **pushdowns are** performed correctly.

1. Brace the abdominals. Grab the hand attachments in an overhand grip about shoulder-width apart, with elbows locked and arms straight. Keep your knees soft rather than locked.
2. Breathe out while pulling the cable down to your thighs in a smooth, controlled motion, arms remaining straight, hips bending slightly forward while keeping the back straight. If you do this exercise properly, you will find that your abdominal muscle will work hard and your arms and back will also get some work.
3. Pause when the hand grips are at thigh level.
4. Inhale while allowing the weights to return up to full arm extension above your head. End in a position where there is still tension on the cable before doing the next repetition.
5. Do three sets of 10 to 12 exercises.

Lying Dumbbell Triceps Extension

Lying triceps extensions are one of the most stimulating exercises to the entire **triceps muscle** group in the upper arm. It **works** the **triceps** from the elbow all the way to the latissimus dorsi.

1. Lie on a flat bench with feet on the ground and head hanging just off the top of the bench, so that the edge of the bench rests in the pit between neck and head.
2. Take the barbell with an overhand grip (palms *away* from body) and hold it out above the head so that the arms are supporting the weight. Do *not* hold the arms straight over the face at 12 o'clock, but rather at an angle more like 10 o'clock, with feet at 3 o'clock. All of the weight should be on the triceps.
3. Now bend the arms at the elbow, bringing the bar down close to the top of the forehead.
4. Keep the elbows in the same position, do not let them sway outward.
5. Press back up to starting 10 o’clock position.

Try to avoid moving your elbows too much;[4] try to keep them the same width apart during the whole movement.

Bench dip

For this exercise, you need a bench that allows you to lift the full weight of your body using triceps muscles. To begin, sit on the edge of the bench and place your hands under your butt. Keep your legs extended in front of you and hold your abdominal muscles in while lifting your spine. Lower your body while bending your elbows slowly, moving past the edge of the stool. Extend your elbows, concentrating on straightening your arms and utilizing the triceps as you

perform this motion. Try doing three sets of 10 triceps dips before resting and continuing with the workout.

1.Better yet, consider using two benches to do what's called a bench dip. Begin by balancing your body on two benches with your feet on one and your hands on the other. Your buttocks will sink in the space between them.

2.Lower your body with your arms until your elbows reach a 90-degree angle. Push up to your starting position.

Nutrition

What is the nutrition?

Nutrition science focuses mainly on food, eating and medicine concerns and health issues. It is a field of many facets, with a large number of areas of specialisation, rooted in chemistry, biology and social sciences. The study of behavior and social factors related to food choices is also part of the nutrition science. Nutrition science is also a vast area of expertise in many fields. These include food and wellness, nutritional activities in the community, science and nutrition training. Those studying nutrition often become nutritionists or dietitians. Diätists and nutritionists are food and nutrition experts for health promotion and disease management. It provides advice on what to eat in order to achieve a healthy lifestyle.

Nutrition is a science which interprets the interaction between the maintenance, growth, reproduction, health and organismal disease of nutrients and other substances in food.

As molecular biology, biochemistry and genetics progress, nutrition is focusing more on metabolism and metabolism-biochemically translated substances within us. The focus of nutrition is also on how healthy diets can prevent or reduce illnesses, conditions and problems. In the same way, nutrition involves identifying how dietary factors such as malnutrition, food allergies, and food intolerance may lead to certain diseases and conditions.

Why is important?

A celebrated saying "you are what you eat". A sound count calories comprises of a well-balanced eat less composed of all critical supplements in right extent. It avoids ailing health and onset of illnesses like weight, diabetes, heart maladies, cancer & stroke to title a few. Your food decisions daily have an effect on your health — however you're feeling these days, tomorrow, and within the future. Good nutrition is a vital a part of leading a healthy life style. Combined with

physical activity, your diet will facilitate your to succeed in and maintain a healthy weight, cut back your risk of chronic diseases (like cardiovascular disease and cancer), and promote your overall health. The risk factors for adult chronic diseases, like cardiovascular disease and both types of diabetes, are progressively seen in younger ages, typically a results of unhealthy ingestion habits and increased weight gain. Dietary habits established in childhood typically carry into adulthood, thus teaching kids a way to eat healthy at a young age can facilitate them keep healthy throughout their life.

The link between smart nutrition and healthy weight, reduced chronic unwellness risk, and overall health is simply too necessary to ignore. By taking steps to eat healthy, you'll air your thanks to obtaining the nutrients your body has to keep healthy, active, and strong. Like physical activity, creating little changes in your diet will go a protracted method, and it's easier than you think.

Food that we eat acts as a fuel to the body & give fundamental supplements which assist act as:

- Energy-giving foods – Carbohydrates, Fats- Energy required constantly for the voluntary & involuntary activities of the body.
- Body-building foods – Proteins, Minerals- Muscles, bones & organs are built up and maintained by the protein supplied by the food. Minerals like iron, phosphorous affect the formation of the blood – skeleton tissue (bones).
- Protective foods – Vitamins, Minerals – essential for safeguarding the body against diseases.
- Regulatory foods – Water, Roughage- Water is required to regulate body processes such as digestion, excretion, maintenance of the body temperature and the electrolyte balance. Roughage helps normal body movements.

Important Nutrients required by the body:

- Carbohydrates
- Proteins
- Fats
- Vitamins and Minerals
- Water
- Roughage

What to eat and what not to? it's imperative for us to understand what to eat and what to take care of a strategic distance from. Your plate should be wholesome and balanced and must embody the proper fixings to produce you the correct nourishment that you just need. As expressed over you want carbohydrates, proteins, fats and vitamins and minerals beside water and foodstuff.

Carbohydrates rich foods:

- Cereals like wheat, brown rice, maize, whole wheat bread, jowar, ragi (Complex) rice, noodles, white flour, biscuits, pasta etc are simple carbohydrate
- Starch, arrowroot, vegetables like potato, sweet potato, and yam
- Fats and oils: Butter, vanaspati, ghee, cooking oils
- Sugar, jaggery, honey

Protein rich foods:

- Milk and milk products like milk, curd, cheese, buttermilk
- Pulses and legumes-soybeans, grams, groundnuts and other nuts & seeds
- Meats-fish, chicken, mutton, eggs

Vitamins & minerals rich foods:

- Whole milk and milk products.
- All green leafy vegetables.
- Coloured fruits & vegetables like mangoes, papaya, carrots, etc.
- Pulses
- Sprouted pulses
- Almonds
- Milk and milk products
- Bengal gram whole
- Til
- Rice flakes

Caloric intake

There is simple formula how to calculate our caloric intake.

- For men: 66 + (13.7 x lean weight in kg) + (5 x height in cm) – (6.8 x age)
- For women: 655 + (9.6 x lean weight in kg) + (1.7 x height in cm) – (4.7 x age)

Activity level factor

- Sedentary – 1.0x
- Very light active – 1.2x
- Light active – 1.4x
- Moderate active – 1.6x
- High active – 1.8x
- Extreme active – 2.0x

Example:
Man 18 years old, 100kg, 20% of body fat, 175cm height, light active
66 + (13.7 x 80) + (5 x 175) – (6.8 x 18) = 66 + 1096 + 875 – 122.4 = 1914.6
1914.6 x 1.4 = 2680kcal

Protein:

Protein is often overlooked in our diet. It is important for regeneration of our muscles and also our organs. Daily intake sould be around 1g of protein per 1kg of bodyweight for non active people. 1,5g of protein per 1kg of bodyweight for light active people. 2g of protein per 1kg of bodyweight for active people. More than 2g of protein per 1kg of bodyweight for proffesional sportsman.

So our example from caloric intake sould consume about 150g of protein per day. This is 630 kcal because 1g of protein is 4,2 kcal. We should focus on complex sources of protein. These sources contain full amino acid spectrum. Another important point is quality of food. We should prefer BIO, Grass fed quality. It is imoprtant for our gut helath.

Sources:

- Grass fed meat (beef, pork, goat, lamb, etc…) About 20-30g of complex protein per 100g raw meat
- Poultry (chicken, duck, turkey, etc…) About 20-30g of complex protein per 100g raw meat
- Fish (tuna, salmon, tilapia, etc…) About 20-30g of complex protein per 100g raw meat
- Sea food (shrimp, crab, lobster, etc…) About 15-30g of complex protein per 100g raw meat
- Eggs (whole, white, yoke) About 7g of complex protein per 1 egg
- Dairy (Cottage chesse, chesse, grecce yogurt, etc…) About 3-10g of complex protein per 100g
- Plant (lentils, bean, pea, soy, etc…) About 10-30g of uncomplex protein per 100g

Fat:

Fat is necessary for our live. It is slow releasing source of energy. Also helps your body produce high amount of hormones and balance our lipid profile and dissolve important vitamins (A, D, E, K).

There is also important quality source of fat. We can use fat from meat if the meat is grass fed in BIO quality. Also we should combine different sources of fat through the day.

For optimal hormonal function we should consume about 1 g of fat per 1 kg of bodyweight.

So our example from caloric intake should consume about 100g of fat per day. It is 900 kcal because 1g of fat is 9 kcal.

Sources:

- Grass fed meat (beef, pork, goat, lamb, etc…) About 10-30g of fat per 100g of raw fatty meat
- Fish (tuna, salmon, tilapia, etc…) - About 10-30g of fat per 100g of raw fatty fish
- Eggs (whole, yoke) - About 7g of fat per 1 egg
- Nuts (cashews, almonds, walnut, etc…) - About 30-50g of fat per 100g
- Plants (coconut, olive, avocado, etc…) - About 10-30g of fat per 100g
- Plant oils (flaxseed oil, fish oil, coconut oil, etc…) - About 10g of fat per 10ml of oil

Carbodyhrates:

Source of energy for our body. In western diet is overconsumption of carbohydrates. So we must be careful about our intake of carbohydrates. Chronic overconsumption of carbohydrates can lead to insulin resistance and than type 2 diabetes. Also it increase bad cholesterol rate.

Amount of carbohydrates is variable. When we designing meal plan we use rest calories for carbohydrates. So our example conusme 150g of protein and 100g of fat. This is 630kcal + 900kcal = 1530kcal. 2680,44kcal – 1530kcal = 1150kcal. 1g of carbs contains 4,2kcal. 1150 / 4,2 = 273g of carbohdyrates per day.

Source:

- Potatoe, yam, sweet potatoe - About 13g of carbs per 100g of raw potatoe
- Rice (jasmine, basmati, brown, etc…) - About 70-80g of carbs per 100g of raw rice
- Fruits (strawberries, blueberries, banana, apple, etc…) - About 10-20g of carbs per 100g of fruits
- Vegetables (brocoli, tomato, salad, etc…) - About 5-20g of carbs per 100g of vegetable
- Quinoa, bulgur, cuscus, oats, etc… - About 50-80g of carbs per 100g

Prevention of steroid abuse

Steroid abuse overview

In many situations, steroids are life savers. For example, corticosteroids open the lungs to allow increased breathing during asthma attacks. However, there are steroids that can be incredibly harmful to one's health, and these are anabolic steroids. Anabolic steroids imitate testosterone in the body, which means they encourage the body to lay down protein, increasing muscle mass. Unfortunately, abuse of anabolic steroids is all too common, especially with bodybuilders and men involved in certain sports.

Of course, anabolic steroids have legitimate uses such as inducing puberty and encouraging the creation of muscle mass for people suffering from severe wasting diseases. Even this comes at a price, though. They can quickly damage overall health for those who are otherwise healthy and induce a number of unwanted effects.

Anabolic steroids are synthetic, or human-made, variations of the male sex hormone testosterone. The proper term for these compounds is anabolic-androgenic steroids. "Anabolic" refers to muscle building, and "androgenic" refers to increased male sex characteristics. Some common names for anabolic steroids are Gear, Juice, Roids, and Stackers.

Health care providers can prescribe steroids to treat hormonal problems such as delayed puberty. Steroids can also treat muscle loss-causing diseases such as cancer and AIDS. But, in an attempt to boost performance or improve their physical appearance, some athletes and bodybuilders misuse these drugs.

People who misuse anabolic steroids usually take them orally, inject them into muscles, or apply them as a gel or cream to the skin. These doses may be 10 to 100 times higher than the doses prescribed for treating medical conditions. Although anabolic steroids do not cause the same high as other drugs, they can lead to a disorder of substance use. A substance use disorder occurs when a person continues to misuse steroids, although this has serious consequences. The most severe form of a disorder of substance use is addiction. People may continue to misuse steroids despite physical problems, high drug buying costs, and negative effects on their relationships. These behaviors reflect the addictive potential of steroids. Research has also found that some users of steroids turn to other drugs, such as opioids, to reduce sleep problems and irritability caused by steroids.

Anabolic steroids tend to be used by men for bodybuilding purposes / muscle gain in their 20s. Signs of abuse usually involve rapid lean muscle gain within a period of 10 weeks. Acne is one of the most significant signs of use. Skin that once looked clear that suddenly begins to break out is

an indicator that something may be wrong, although acne is also a normal occurrence among teenagers.

Effects of Steroid Abuse

Anabolic steroids are used as performance-enhancing drugs to increase the ability to do work and exercise by abnormally stimulating muscle growth, strength, and aerobic capacity. This increased function comes with the cost of life-threatening side effects. The complications of abuse of anabolic steroids are the result of excess testosterone affecting almost all of the body's organ systems. Some of the effects are reversible and decrease as drug abuse stops while others are permanent and irreversible.

Anabolic steroids have an androgynous factor; they can also affect specific characteristics of the sex. The most infamous side effects are the shrinking of the testicles and the growth of breast tissue in men due to the conversion of the steroid into estradiol. This can lead to infertility as well. The drug is converted into testosterone in women, which can lead to increased body hair and menstrual irregularities. It can also deepen the voice on a permanent basis. Long-term effects for both sexes include increased cholesterol levels and increased blood pressure. It also increases the risk of diabetes. Testosterone tends to result in extra acne due to the stimulation of the oil-producing sebaceous glands, and can also accelerate balding. Users are also prone to rapid mood swings, possibly resulting in so-called "roid rage" or mania.

Skin abscesses can occur at injection sites and can spread to other body organs. Endocarditis, or heart valve infection, is not uncommon. Psychiatric and psychological complications include manic behaviors and psychosis, including hallucinations and delusions. Aggressive behavior is common and known as "roid rage." Because muscle growth can occur quickly, it can cause stress on the tendons that attach the muscle to the bone and those that abuse anabolic steroids are at risk of tendon rupture. Anabolic steroids, especially in the skull and face, can increase bone production. As the maxilla and mandible grow, the teeth can splay apart. There may be front overgrowth, giving an "Incredible Hulk" appearance. If teenagers abuse steroids before they have finished growing, these drugs can prematurely close bone growth plates, leading to shorter stature. While many users often treat these side effects as minor, they can lead to major life-altering events, such as heart attack and stroke. Like cigarettes, steroid abuse results tend to be subtle, but cumulative.

Treatment of steroid abuse

Diagnosis of anabolic steroid abuse may occur with a failed drug test in high school, college, and professional athletes, but many people who abuse these drugs are never randomly tested. Doctors often make the diagnosis when someone develops one of the side effects of using steroids. Once the potential diagnosis of drug abuse is considered, it is important that the health care provider offers the patient the opportunity to consider drug treatment options just like any other addictive drug. However, the patient must take the first step in diagnosis and treatment by admitting that there is a potential for abuse and their willingness to consider intervention and treatment.

Current views recommend that steroid use treatment address the underlying causes of steroid use. This may include:

- psychological therapies (and possibly medications) for muscle dysmorphia.
- endocrine therapies to restore function in those suffering from hypogonadism and to alleviate symptoms of depression.
- antidepressants for those whose depression does not respond to endocrine therapies.
- pharmacological and psychosocial treatments for patients who are also dependent on opioids, which appear to also be effective in alleviating signs of anabolic steroid dependence.

CONCLUSION

As with most drug substances, education is the key to preventing steroid abuse. Individuals who understand that steroids are drug substances that can have significant negative effects on their body, relationships, health and life and can lead to tolerance and addiction problems are better able to make informed decisions about avoiding the use and abuse of these drugs. Furthermore, since the use of steroids is illegal and unacceptable in most professional sports and random drug testing is often performed in professional sports, taking these drugs can be absolutely detrimental to the athletic career of the individual.

Fortunately, steroid abuse can be successfully treated and resolved with an effective treatment program that addresses all the causes and effects of the individual's use of steroids

and helps them gain the tools necessary to succeed in the future without the use of these or other drug substances.

CURRENT EU SPORTS POLICY

Importance

Sport is an area of relatively new responsibilities for the EU, acquired only with the entry into force of the Lisbon Treaty in December 2009. The EU is responsible for developing evidence-based policy, as well as fostering cooperation and managing initiatives across Europe to support physical activity and sport. A specific budget line was made available for the first time in the 2014-2020 period under the Erasmus+ program to support sport projects and networks.

The EU is working towards achieving the goals of greater equity and openness in sporting competitions and greater protection of sport practitioners ' moral and physical integrity while taking into account the specific nature of sport. In particular, the EU covers three sport activity areas:

(1) the role of sport in society;

(2) its economic dimension; and

(3) the sport sector's political and legal framework.

Achievements and Policy developments

White Paper on sport and the Pierre de Coubertin action plan (2007)

The first' complete initiative' in sport by the EU was the White Paper on Sport for July 2007 from the Commission. The Commission has collected useful evidence on issues to be addressed in the future through the implementation of the proposed measures. Several objectives were envisaged in the White Paper, such as enhancing the role of sport in society, promoting public health through physical activity, boosting voluntary activity, enhancing the economic dimension of sport and the free movement of players, combating doping, corruption and money laundering, and controlling media rights, among many other objectives.

Developing the European dimension in sport

This is the Commission's first policy document on sport adopted since the Treaty of Lisbon came into force. This communication stresses the potential of sport to contribute substantially to the overall objectives of the Europe 2020 strategy, recognizing that sport enhances employability and supports social integration.

The communication from the Commission also proposes that the EU should sign the Council of Europe Anti-Doping Convention, develop and implement safety measures and safety requirements for international sports events, make progress to implement national objectives based on the guidelines on physical activity and develop standards for disabled access to sports events and venues and the EU's physical activities.

EU Work Plans for Sport (2014-2017 and 2017-2020)

The EU Sport Work Plan represents the European Sports Policy's most important document. The Council adopted the first plan in its 20 May 2011 Resolution, and the second in its 21 May 2014 Resolution.Three priorities were set out in the 2014-2017 plan: sport integrity, its economic dimension and the sports-society relationship. The Member States and the Commission have established five expert groups in order to deal with these topics of priority, which cover match-fixing, good governance, the economic dimension of sport, health-improving physical activity (HEPA) and the development of sports human resources.

The new EU work program for sport (2017-2020) was adopted by the Education, Youth, Culture and Sport Council at the Sports Meeting on 23 May 2017. The overall objective is:

- Sports integrity, with emphasis on governance, child safety and the fight against match-fixing, doping and corruption;
- The economic dimension of the sport and digital single market innovation;
- Focusing on social inclusion, coaches, media, environment, health, education and sport diplomacy.

Action programmes

Erasmus+

In the 2014-2020 EU Education, Training, Youth and Sport program, sport is a part of Erasmus+. 1.8% of the annual budget for Erasmus+ is spent on sport-related activities in order to support European sports partnerships and not-for-profit European sports events. The program should also help strengthen the foundation for the establishment of policy, i.e. fund studies. The program also supports dialog with relevant EU stakeholders.

A proposal for a Regulation laying down a future Erasmus Program (2021-2027) on 30 May 2018 was published by the Commission, in which sport has maintained a 1.8% share of the budget and is currently covered by key actions (Learning Mobility and Political Development Support and Cooperation). The Commission proposal is being reviewed by both Parliament and the Council at the moment.

European Week of Sport

In its 2012 European Parliament Resolution, the European Sports Week (ESW) promote physical activity by Europeans and support it by Erasmus+. In fact, 59 percent of Europeans never or rarely practice or play sports. These data are obtained from have been shown by a Eurobarometer survey. This leads to an increase in the spending on the health care sector, loss of productivity at work and lower employee life as negative impacts. The EU promotes the European Sports Week at EU, national, regional and local level to raise awareness among its citizens each year.

Sports and migrants

The EU's priority for sport's role in society is social inclusion. Sport can make an important contribution to the integration of migrants in the EU by uniting people, building communities and fighting xenophobia and racism. The European Commission facilitates the exchange of best practices on migrants ' integration. A study examining how sport supports the integration of migrants throughout Europe was published by the Commission in September 2016. The Commission also supports migrants ' social inclusion projects and networks through the European Structural and Investment Funds and the Erasmus+ programme. Projects like the European Sport Inclusion Network— Promoting equal opportunities for migrants and minorities in European sports clubs by means of voluntary activities and social inclusion and volunteering.

SUMMARY

Sport is one of the main tools that the European Union takes into account in improving the quality of life of the young European population. This is evidenced by the many existing programs and policies that have been initiated by the European Union and are under way as a result of studies and research that demonstrate the benefits of sport and active lifestyles. Inactivity is one of the main problems of modern society and it is both an economic and a social obstacle. This also raises the desire to adequately counteract against disadvantage of the stagnant way of life. Another problem that enters public life is the excessive use of steroids and medications that enhance body mass growth processes. This is definitely an obstacle to be taken into account, given that those affected by these problems are young people, who yet have the opportunity to unleash their potential in society.

Efforts need to be directed towards building an information network that benefits young people, highlighting the benefits of sporting activities. The activities in this project are designed to show the young that sport is useful and at the same time can be fun. Playing sports ' health

benefits include proper weight management, effective heart function, control of diabetes, lower cholesterol levels, increased blood circulation, and lower levels of hypertension and stress. It contributes to muscle toning and bone reinforcement. It also contributes to good energy, discipline and respect for one another.

Sports practice is vital for young people's integral development, for their physical and emotional health and for the development of precious social relationships. It provides opportunities for play and self-expression, particularly for young people who have few oppurtunities in their lives. Sport also offers healthy alternatives to harmful measures, such as drug abuse and crime involvement. Physical education is a key part of quality education in schools. In addition to promoting physical activity, physical training programs have been shown to correlate them with enhanced academic achievement.

List of other sources

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