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**ASPECTS REGARDING THE  
IMPROVING OF FITNESS AND HEALTH  
ISSUES BY CYCLING**

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# Aspects Regarding the Improving of Fitness and Health Issues by Cycling

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## Abstract

*This article is trying to explain all the benefits cycling has over fitness and specific health issues, the importance of a training plan, of a balanced diet and a good hydration during a training period of time and, also, presents the results of some studies regarding the importance of ride biking, generally, and exercising, particularly.*

*Riding a bike is a healthy activity. Regular exercise in the form of cycling will make people fitter, stronger, will help them reduce fat levels and look in better shape, boost their energy and generally improve their mood.*

*For many people, cycling is the first step to independence and exploration. Good planning and preparation are essential to ensure that cycling is a positive experience to everybody.*

## Keywords

*cycling, fitness, training, health, training plan;*

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## 1. Introduction

For most people, the simple practicalities of getting around town, commuting or embarking on a short off-road leisure ride with family are all that interests them. Even when cycling aims are that simple, just working on a few key skills and boosting confidence will enable people to get the most out of their cycling experience.

Improving fitness will also make cycling easier and more effective.

Most everyday cycling is an aerobic activity, when muscle generate energy for movement using oxygen. Sprinting or riding up hills is anaerobic exercise, when the muscle burn energy supplies without using oxygen, because is not enough available.

Aerobic activity is sustainable for long periods; anaerobic exercises are only possible for shorts bursts of time.

Unless training to race the bike, it is best for everybody not to get too hung up on whether they are exercising aerobically or anaerobically; just getting out and riding will be enough to boost their fitness levels far above those of the average members of the population. They may want to push themselves sometimes, but they have to be careful not to overreach themselves.

## 2. Effects of cycling

Cycling mainly works the legs, but the arms, back and core muscles also get a significant workout during a ride. More importantly, the cardiovascular system works hard and becomes more efficient. After just a few weeks of regular cycling, individuals will be less out of breath when climbing stairs and will be able to sustain longer periods of activity (Pickering, E., 2009 ).

Depending on how hard it goes, an hour-long bike ride can burn between 300-800 calories, depending of intensity workout.

In a riding activity at a moderate intensity, the body will gradually burn its fat stores and if the individuals are overweight, they will lose weight by cycling, and the most important thing it will not be necessarily to lose weight, but to reduce their body fat to a healthy level.

As an aerobic activity, cycling can make people breathe deeply, perspire and experience increased body temperature, which will improve their overall fitness level.

Cycling is great exercise, but it will have a far more positive effect on the body and health if eating and drinking properly as well.

A balanced diet, with natural foods and sensible levels of hydration will fuel the body much more effectively than dinners outside the house and junk food (Manescu, D. C., 2010).

By putting better fuel in to the body, it will have enough energy to continue cycling and also reap the health benefits.

Hydration is very important for the general health and cycling can dehydrate quite badly on a hot day, so, the advise is to drink plenty of water. There is no correct amount of water to drink in a day, it varies enormously depending on the temperature, time and type of activities practiced, but in hot weather, when riders have been out for a long ride, the body needs at least 2-21/2 litres of water.

In conclusion, cycling can offer some major benefits like :

- builds and increases strenght and muscle tone;
- builds stamina;
- improves cardio-vascular fitness;
- improves joint flexibility;
- eats up calories;
- improves heart health;
- improves coordination and posture;
- reduces stress, anxiety and depression;
- prevention or management of disease.

Fitness cycling can really be integrated in any fitness program; with every turn of the wheel calories are burnt, strenght is build and wellness is achieved.

### **3. The purpose of the research**

The purpose of this analysis is to present, in a way as simple and concise for everybody, the role that cycling can have both for the improvement of fitness level and in prevention and improvement of health issues that may occur because of sedentary lifestyle and daily stress routine.

At the same time, in order to obtain a higher level of fitness and a better health, a proper and healthier nutrition and a more intense hydration are absolutely mandatory in this case.

#### 4. Methods

The most important principle involved in gaining fitness is overload (Manescu, D. C., 2008). By stressing body muscles, the cells within the muscles break down to a microscopic level, which explains the tiredness and fatigue we all feel after exercise, but the body will rebuild those cells stronger than before and the final result will offer a fitter body and level.

As time progresses and athletes continue to ride, they will be capable of going just a little bit harder or faster than they could before. The muscle cells will break down again, and be rebuilt stronger than ever.

In only two months it is possible to make big changes in the level of fitness, but at this stage the most important impact on life will be to create the long term habit of regular cycling.

Looking on a training plan as a closed period of time that is only done once, it appears the risk that when it is over, riders will sit back, relax and let all their hard work go to waste.

##### 4.1 Basic two month training plan

The training plan below will suit anyone taking up cycling for the first time, but for unfit or overweight individuals it is best to consult a doctor before taking up physical exercise.

**Table 1**

Day	Weeks one to four
Monday	Gentle walking
Tuesday	30 minutes ride, slow and steady
Wednesday	Gentle stretches
Thursday	45 minutes ride, slow and steady
Friday	Gentle walking with stretches
Saturday	1 hour ride, slow and steady
Sunday	1 hour ride, slow and steady

**Table 2**

Day	Weeks five to eight
Monday	Gentle walking with stretches
Tuesday	1 hour ride at a moderate pace
Wednesday	Gentle walking
Thursday	1 hour ride at a moderate hills; try harder up the hills
Friday	Gentle walking with stretches
Saturday	1 hour and a half ride, slow and steady
Sunday	1 hour ride, slow and steady

It is very important to stick to the programme. Following the training plan, being flexible and keeping a record of each succesfull ride, these are three essential conditions to have succes. After one month, assesing the progression, moving on to month two and then plan for month three. This way riders will have the motivation of knowing that they are fitter than they were when they started and they have a long term plan beyond the initial two month period.

The most important thing is to establish cycling as a regular part of life and the fitness benefits will come hand in hand with that.

By gradually making training harder, the body will adapt to become fitter, stronger and more flexible.

## **5. Results and discussions**

Cycling can improve both physical and mental health and can reduce the chances of experiencing many health problems like:

*Obesity and weight control* – cycling is a good way to control and reduce weight, as it raises the metabolic rate, builds muscle and burns body fat. Research suggest that cycling should be burning at least 2000 calories/week through exercise; steady cycling burns about 300 calories/hour. British studies shows that a half-hour bike ride every day will burn nearly five kilograms of fat over a year (Cavill, N., Davis, A., 2009).

*Cardiovascular disease* – regular cycling stimulates and improves heart, lungs and circulation, reducing the risk of cardiovascular diseases; A Danish study conducted over 14 years with 30000 people, aged between 20 and 93 years , found that regular cycling protect people from

heart disease; it also shows that people who cycle to work have two to three times less exposure to pollution than car commuters, so their lung function is improved (Cavill, N., Davis, A., 2009).

*Cancer* – research shows that if someone is cycling, the chance of bowel cancer is reduced; some evidence indicates that regular cycling reduces the risk of breast cancer.

*Diabetes* – large scale research in Finland found that people who cycled for more than 30 minutes/day had a 40 per cent lower risk of developing diabetes. (Lindstrom, J. et al., 2006).

*Bone injuries and arthritis* – cycling improves strength, balance and coordination; it may also help to prevent falls and fractures.

*Mental illness* – due to the effects of the exercise itself and because of the enjoyment that riding a bike can bring depression, stress and anxiety can be reduced.

As we have discovered, cycling has beneficial effects on fitness levels, regular cycling makes individuals fitter and healthier, and for many this is enough. But why stop here? If designing a long term training plan and work on improving steadily in the long term, the fitness level will continue to improve with all the benefits that involves. It is a good idea to build a strong foundation of fitness, then progress further by adding time on the bike, or going a little harder (Wadsworth, A., 2012).

## 6. Conclusions

Cycling burns fat, but also builds muscle, so a lean body mass may increase after a few months of cycling; this is perfectly healthy.

Incorporating the bicycle into an organized exercise routine is very easy: people can ride to and from work every day with no other organization, or they can set aside two evenings a week and go for a ride, plus an extra ride at the weekend.

The only limiting factor is the schedule, so individuals should work with it, not against it!

When start riding a bike, people have deliberately chosen a fitter and healthier lifestyle; they have chosen to be practical and self-sufficient and much more, they have chosen to have fun.

Cycling is the ideal activity to combine fitness with fun and adventure and a great way to spend time outdoors.

## References

- Cavill, N., Davis, A. (2009). *Cycling England. Cycling and health: what's the evidence.*
- Lindstrom, J., Ilanne-Parikka, P., Peltonen, M., Aunola, S., Eriksson, J., Hemio, K. (2006). *Sustained reduction in the incidence of type 2 diabetes by lifestyle intervention: follow-up of the Finnish Diabetes Prevention Study*, Lancet.
- Manescu, D. C. (2008). *Dezvoltare fizica si musculara.* Bucuresti: Ed. ASE.
- Manescu, D. C. (2010). *Alimentatia in fitness si bodybuilding.* Bucuresti: Ed. ASE.
- Pickering, E. (2009). *The illustrated practical encyclopedia of cycling.* Hermeshouse.
- Wadsworth, A. (2012). *The illustrated preactical encyclopedia of fitness training.* Hermeshouse.

## Biodata



Born in 1977, I graduated National Academy of Physical Education and Sport from Bucharest in 1999. I have a Master Degree in „Physical education” (2000) and a PhD with the theme thesis „The improvement of the methods of developing the motor skills which favour the football player on positions, in juniors I” (2008).

I work since the year of 2000 in the Department of Physical Education and Sport at the Academy of Economic Studies from Bucharest, being associate professor from 2013.

As a sole author I have written 5 books and presented more than 50 articles at national, international conferences and in different journals in sport` domain.

I achieved 2 bronze medals in 2005 and 2011 editions of World Inter-University Games both with men`s football team of my Academy, being part of this competition for 10 editions in a row.