

Waterbiking in the swimming pool

Made by: Zsuzsanna Kovács
Szombathely, 1 February 2018



Definitions



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- Health is not only the lack of illness, but it is the state of corporal, psychological and social wellbeing. (WHO, 1946)
- Life quality is the perception of the individual about his/her life situation, as it is influenced by the culture, the value systems of his/her life space, as well as by his own aims, expectations, patterns and relationships. (WHO, 1997)
- By physical activity, we mean all kind of physical exercise that comes along with energy use. It includes sport activity.

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Impact of physical activity made on health and life quality (Gémes, 2008)



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- It plays a definitive role in the prevention and intervention of several chronic illnesses
- Higher number of days spent at work
- More efficient work
- Prolongation of active years spent at work
- Good life quality
- It improves corporal and psychological health, psychosocial wellbeing, as well as the ability of tackling with stress.

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Sport and the disabled people

(Magyar, Tóthné Aszalai, Máténé Homoki, 2011)



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Regular sport

- develops their life quality,
- helps them to preserve their current health state,
- enriches their social relationships
- provides them an opportunity for personal development, self-assessment, active recreation, and meaningful entertainment,

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- It makes every day life meaningful,
- It can open the „gates” towards other cities and countries,
- and doing sport activities together with their able-bodied partners can facilitate integration into society to a great extent.

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Swimming



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- As a movement activity, it is a purposeful activity targeted to a particular aim that develops personality in multiple ways.
- It is a recreational sport that builds from different sport elements, but it is also a recreational sport targeting abilities and/or experience.
- It belongs to the so-called stamina-enhancing sports.

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Its impact made on health

- Development of the muscular system and improvement of locomotoric disorders.
- Positive changes in the skeletal system.
- It has a positive impact on the respiratory system.
- Swimming has a favourable impact on the nerve system and the psychics.

(Dr. Melinda Bíró)



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- It makes you control your breathing.
- Almost all the muscles work.
- It makes work both the upper and the lower body at the same time.
- It influences the heart and coronary system, the respiratory system and the metabolism
- The oxygen supply of the tissues and cells improves
- Only a small fragment of the body mass burdens the joint, and therefore you can train the muscle in a virtually painless way.
- During swimming, happiness hormone is released, so it also plays role in the treatment of depression.

(Dr. Szilvia Boros)

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Steps of swimming training



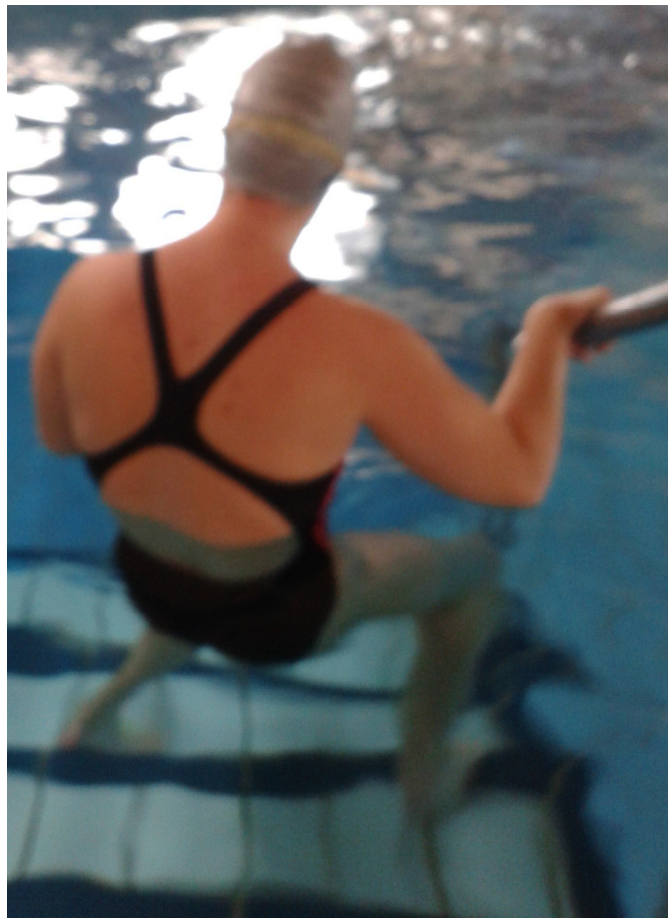
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- Getting used to water:
 - getting acquainted with water
 - drowning underwater
 - opening eyes
 - air exhalation
 - floating
 - sliding
 - jumping into water
 - combined exercises
- Getting used to deep water
- Teaching swimstrokes

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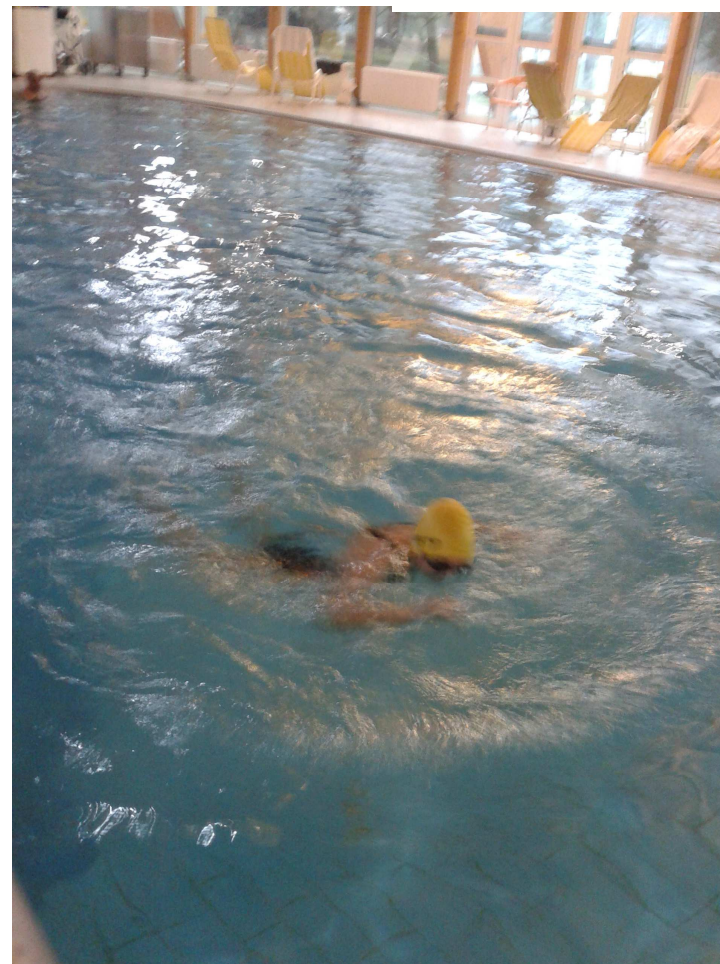
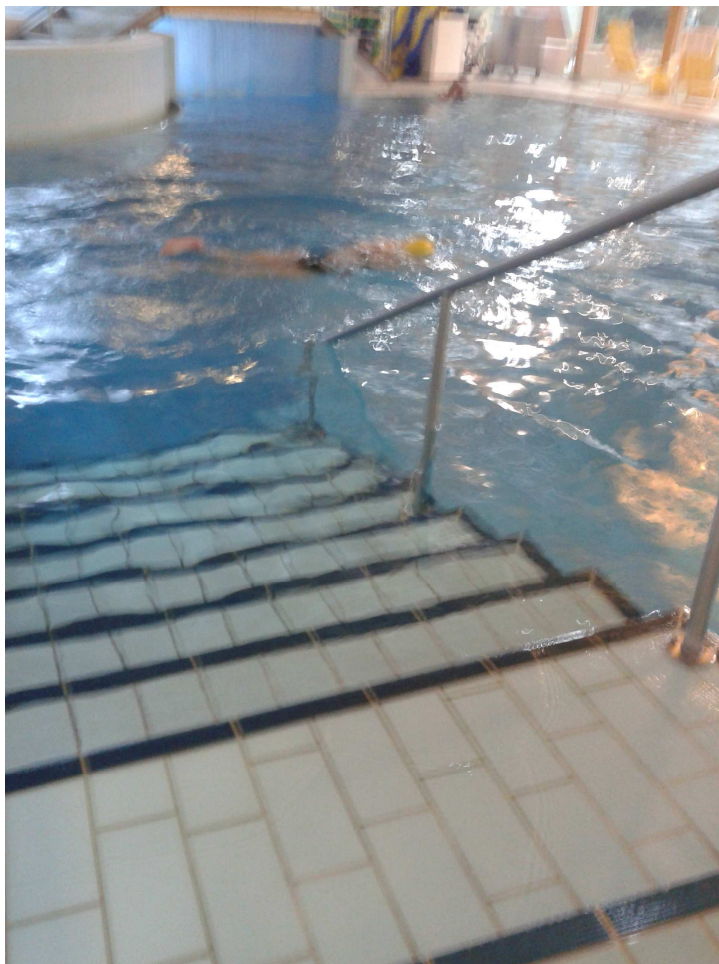
Splashing opportunities



While swimming

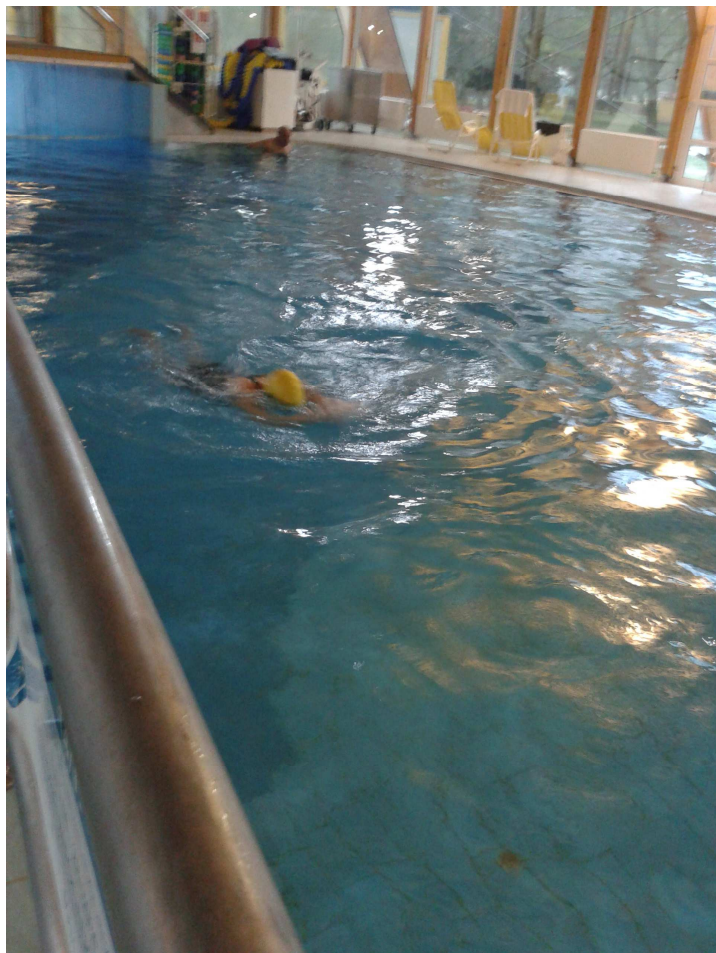


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Tools facilitating swimming



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Use of swimming boards



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<https://www.youtube.com/watch?v=9Yt5WTsPfZg>

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Use of swimming belt and swimming buoy



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<https://www.youtube.com/watch?v=sdnVF8GRWJ8>

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Use of water noodle



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<https://www.youtube.com/watch?v=JArSuSyh-K0>

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Use of paddles



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Use of palm resistance



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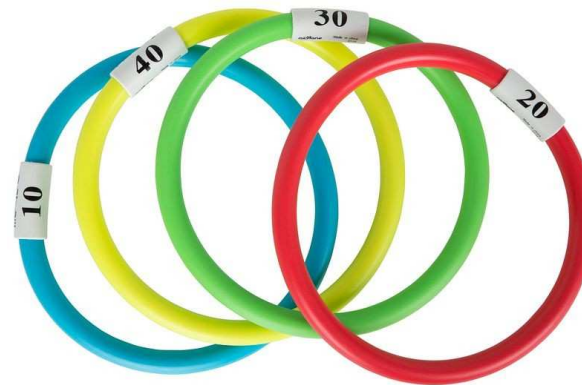
<https://www.youtube.com/watch?v=QetMKBsUSxA>

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Application of drawing rings

<https://www.youtube.com/watch?v=krCugHF0EKU>

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Cycling



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- It belongs to the so-called endurance sports.
- Competence-experience
- Besides psychological health, it also establishes corporal and intellectual fitness
- Primarily the leg muscles are involved in the muscle work

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Its impact made on health







It improves the stamina of the heart and the coronary system,

- It makes the work of the heart economical,
- It enhances the blood supply and the oxygenisation of the organs
- It improves the work of the respiratory system
- It reduces the blood fat (triglyceride) level,
- It rises the protective cholesterine (HDL) level,
- It enhances sugar-tolerance.

(www.sportorvos.hu)



NORMAL GLUCOSE TOLERANCE AND THE DIAGNOSTIC CRITERIA OF CARBOHYDRATE METABOLISM DISORDERS (WHO, 2006)

Status of carbohydrate metabolism	Glucose concentration, mmol/l (venous plasma, laboratoric measure)
Blood sugar value on empty stomach OGTT value after 2 hours	$\leq 6,0$  $< 7,8$ 
Reduced glucose tolerance (IGT) On empty stomach and OGTT value after 2 hours	$\leq 7,0$  $\geq 7,8 < 11,1$ (7,8-11,1) 
Diabetes On empty stomach and OGTT value after 2 hours	$\geq 7,0$  $\geq 11,1$ 

Outdoor

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Indoor

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Aquabike - HydroRider



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Aquabike – HydroRider in use



Use of HydroRider for disabled people



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- For whom?
- With what kind of modifications?
- How frequently and at what intensity?
- By helpers?
- In a group of how many people?
- What outcomes can be expected by it?

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HydroRider training



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<https://www.youtube.com/watch?v=GV7YArOwGGo>

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<https://www.youtube.com/watch?v=AWEhIOFsAxo>

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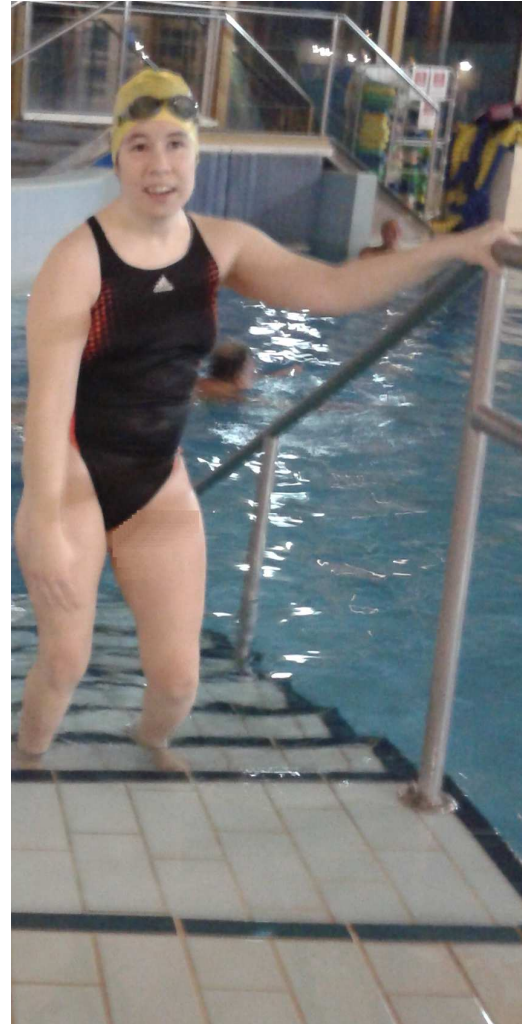
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<https://www.youtube.com/watch?v=apujh46Yj-M>

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Thank you
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