

# ARGUMENTS IN FAVOUR OF PRACTISING AQUA AEROBICS

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**Abstract:** *In the most developed EU countries, sports, in its most extensive understanding – sports for all, for health, education and recreation – represents a state policy, a performance and social organism viability criterion. The EU Constitution considers sports a key-factor of national welfare and a generator of vital benefits. In order to attract people towards physical activities athletic programmes need to be restructured and renewed, as well as adapted according to the age, sex and education. Making people aware in relation to physical exercise brings personal benefits in the change of lifestyle, as well as in maintenance or increasing of work efficiency and health.*

**Keywords:** *sports for health, aqua aerobics.*

## 1. Introduction

The EU Constitution insists on the need to defend the social, educational and cultural role that sports play in the modern European society and therefore has adopted a text that gives associates a special value to sports, considering it a key-factor of national welfare and generator of vital benefits. ([www.olympic.org](http://www.olympic.org))

The current paper has the following purposes:

- To construct a motivational strategy in order to attract people towards exercise, by renewing the sports programmes and adapting them to the age, sex and education;
- To highlight the evolution of significant somatic-functional parameters, following the process of adapting the body to the effort.

## 2. The Hypothesis of the Paper

We consider that through restructuring, renewing and adapting sports programme according to the social requirements, **we will increase the interest** of different categories of individuals and **we will attract the people towards systematic exercise.**

In order to achieve the goals we have set, we organised an aqua aerobics programme, for adult women, which started in March, 2006, with a number of 14 women, aged between 23 and 63. In May, 2006, there were 27 women, organised in two groups.

The aqua aerobics group has exercised twice a week, in 50 minute sessions, on musical background, consisting in well-known songs, in a tempo of 2/4, and the instructors were 4<sup>th</sup> year Sports and Physical Education students, Nechita Bogdan and Băţă Andreea.

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The main **objectives** of the aqua aerobics group were:

- Attracting adult women towards this form of exercise;
- Improving health condition;
- Increasing mobility, elasticity and muscle strength;

We registered the evolution of the following indicators:

- **Anthropometric parameters** (height, weight);
- **Abdominal muscle force** (vertical leg lifting from lying on the back, number of repetitions in 30 s), **lumbar mobility to the front** (from sitting, heels on the gym bench support, bending the torso arms raised, negative values indicating

good mobility, positive values indicating poorer mobility);

- Evaluating physical condition, through the **Ruffier test** (Rosetti, 1994, p. 254). The test is based on the cardiac frequency reaction during rest (in the sitting posture), after a standard effort of 30 squats in 45 s, and after recovering the posture (in the 45-60th seconds from the first minute after the effort).

Following the statistical processing of data, we obtained the following specific measurements:

*The statistical analysis of initial values (1) and final values (2), of the following characteristics - weight, lumbar mobility, abdominal force and Ruffier values*

Table 1

Characteristics	Mean	Dispersion	Nr.of statistical units	F <sub>calculated</sub>	F <sub>table 1%</sub>	t <sub>calculated</sub>	t <sub>table 1%</sub>
Weight (1)	68,84	156,64	13	1,009539	4,15	17,93	2,48
Weight (2)	68	155,16	13				
Mobility (1)	-5,38	5,42	13	0,459322			
Mobility (2)	-8,84	11,8	13	0,517824			
Abd. force (1)	10,53	2,76	13				
Abd. force (2)	15	5,33	13				
Ruffier (1)	20,12	13,9	13	1,085938			
Ruffier (2)	17,47	12,8	13				

We will continue by representing these measurements as diagrams:

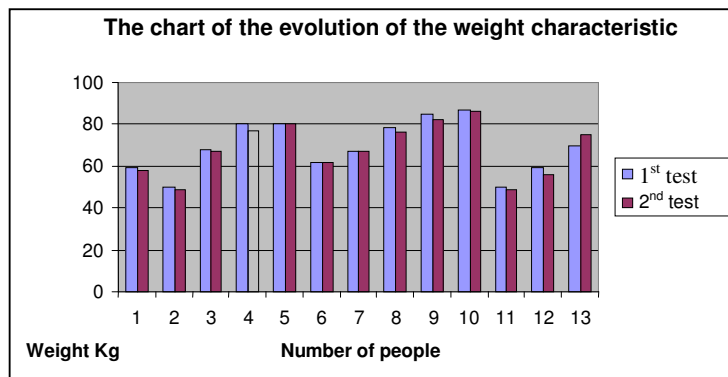


Fig. 1. *The chart of the evolution of the weight characteristic*

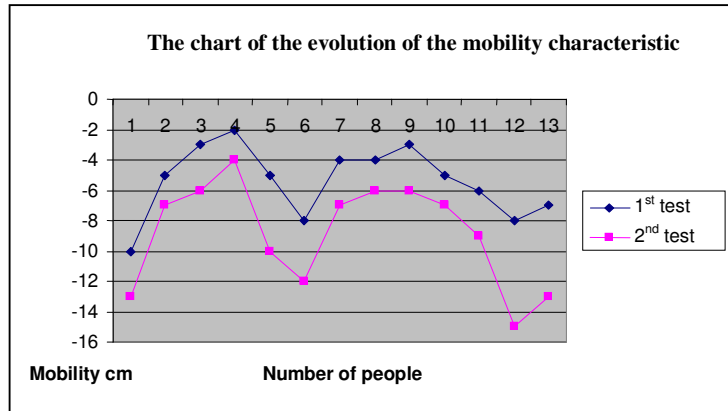


Fig. 2. The chart of the evolution of the mobility characteristic

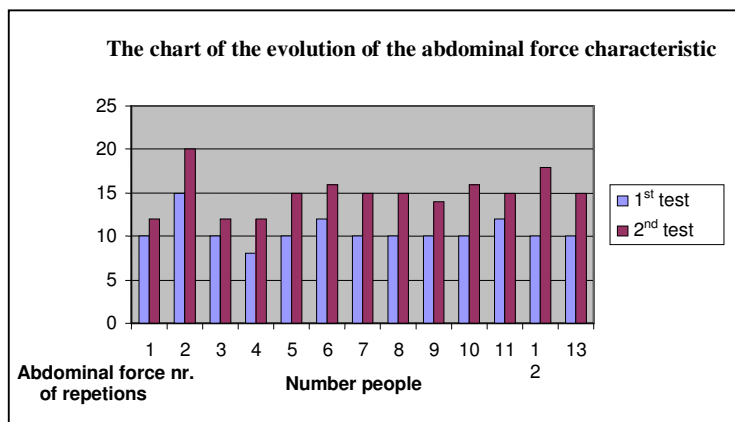


Fig 3. The chart of the evolution of the abdominal force characteristic

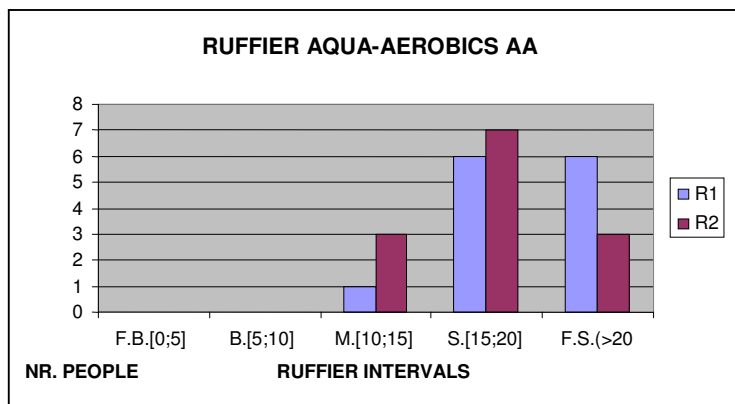


Fig. 4. The chart of the evolution of the Ruffier test results

Following the analysis of statistical data we established the following:

- The activity is new, attractive, exciting;
- The number of participants doubled within two months;
- The average weight decreased (by 0,84Kg), the mobility of articulation increased (by an average of approximately 3cm), the muscle effort capacity of abdominal muscle increased (5 executions in 30 s), all differences are significant thus rejecting the null hypothesis;
- The decrease of the Ruffier value by approximately 3 points, a slight displacement of the chart to the right, which is o the good values, the differences are significant;
- During the course, no illnesses of the participants were recorded, their health condition improved, depressions were removed.

### 3. Conclusions

Implementing a restructured and renewed sports programme has assured:

- The increase of interest and attracting adult women towards aqua aerobics activity.
- The doubling of number of participants within two months.

### Suggestions

- To continue organising the aqua aerobics programme.
- Organising groups according to age and education.

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