

Promotion of Swimming in Fitness

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Abstract: Reasonable swimming promotes the health of certain groups, including infants and old people. Meanwhile, it has positive effects on disease prevention and health keeping. The work analyzes and summaries significances of swimming with literature review method. Therefore, we get the promotion of health with swimming. The innovation point of the work is to analyze ordinary and special people independently. Thus, it will be discussed comprehensively. Moreover, it will have certain positive effects on the development and popularity of swimming.

1 INTRODUCTION

Swimming is quite a popular seasonal sport among people. In ancient times, people learn it by seizing birds and fishes in the water for survival. Modern swimming actions are formed gradually by imitating postures of fishes and frogs. It can be divided into butterfly, backstroke, breaststroke and freestyle from a competitive perspective. However, swimming is just one of the various water sports that cater to people of different ages, which explains its popularity. It is not only interesting, but also plays an important role in exercising, strengthening body and fitness. Therefore, studying its promotion of health is of significant importance for the development and popularization.

2 PROMOTION OF SWIMMING IN BODY BUILDING

2.1 Promotion of Cardiovascular Function

Due to resistance of water, people's energy consumption will lead to the acceleration of cardiac motion and heart rates. Meanwhile, heart pressure grows and blood output becomes large. Thus, people who insist on swimming will have exercise-induced increase in hearts in physical activity. Contraction of heart muscle strength will also increase. Meanwhile, heart rates of people above in quiet places become slower; each pulse output grows; blood vessel wall

thickens; elasticity increases. Thus, increases in the operational efficiency of human cardiovascular systems will strength cardiovascular functions and human health.

2.2 Promotion of Respiratory Functions

According to the research, lung capacity of high-level swimmers reaches 7,000ml, which also reaches 4,500-6,500ml among ordinary people. People who have lung capacity ranging from 3,000-4,000 are of standard level, which means swimming improves more than 1/3 of lung capacity. The reason why swimming improves it so greatly is that water density is more than 800 times of air density. Thus, people get more pressure and have more difficulties in breathing underwater than on the ground. When chest and abdominal cavity are pressed by water, bigger chest muscle strength is needed. Moreover, sports underwater need more frequent breathes to absorb lager amounts of oxygen. Thus, health of athletes' respiratory functions will be promoted.

2.3 Role in Promoting Body Temperature Regulation

Temperature of body is clearly higher than that of swimming pool, and water in the pool is more than 10 times faster than air in temperature conduction. Therefore, body will keep regulating temperature to keep it stable. People who swim often have relative healthier and faster temperature regulation and adapt to outside temperature easier.

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2.4 Role in Promoting Immune System

Thanks to the stimulation of cold water for a long time, swimming can improve body's adaptation to environment changes. Meanwhile, long time swimming can effectively exercise the zang-fu organs, which will improve cell viability and strengthen body. Great improvements will be seen in preventing colds and viral flu erosion. Thus, immune system will be improved effectively and people will not be vulnerable to viruses or bacteria. Some patients with chronic diseases get better or even recover after swimming under the guidance of doctors. For example, patients with chronic asthma or bronchitis can improve their immune system with swimming. Thus, their health will be improved due to the strengthening of disease resistance.

2.5 Role in Promoting Fit-keeping

Compared with other sports, swimming exercises body more fully and completely. Meanwhile, it produces more extensive impacts. With limbs, head and neck's working together, and cooperation of waist, legs, back, chest and abdominal parts' muscle groups, athletes can exercise whole body despite water resistance. Besides, the exercise of muscle and coordination will make figure more flexible and more standard. Therefore, swimming can make athletes more fit and trim.

2.6 Role in Adjusting Psychology

Will is crucial to human beings, which is a state of mind that fights to realize dreams. Meanwhile, it is an important manifestation of human self-initiative and motivation. Exercising is to discipline relentless in people, so as to lay a solid ideological foundation to achieve goals. As a fitness sport, swimming also exercises will and regulates mentality. In particular, swimming of long distances, in the winter or deep water, needs people to overcome it psychologically and to improve skills. After struggling with hard work, people can do sports in the relatively extreme environment. With the right guidance of theory and own efforts, not only physical fitness is improved, but also athletes feel proud. Moreover, it is a more profound success that is obtained after overcoming extreme conditions or hardships. Therefore, long time participation in swimming can effectively reduce pressure of work and study, eliminate some bad moods, and relax people while exercising.

3 PROMOTION OF SWIMMING TO SPECIAL GROUPS IN BODY BUILDING

3.1 Promotion of Infants' Health

Many people feel incredible when they know infants can swim, after all it is dangerous. However, in foreign countries, people attach importance to infants' swimming in the middle of last century. They think swimming can exercise infants well and make them adapt to the outside world better. However, China's research on infants' swimming just started, and is still in the primary stage. Many documents prove that swimming can improve infants' health. Information shows a maternity hospital in Guangzhou introduces swimming to newborn babies, once a day for 10-15 minutes. Researches among 100 infants prove that contact with water for some time not only develops infants' organs, but also lets them enjoy healthy life. They are listed as follows:

Firstly, it will help infants adapt to the outside environment in the shortest time as they experience the biggest change when they come from wombs to earth. When in the amniotic fluid, they cannot breathe with lungs. After birth, they sense differences of the world themselves. However, it needs a process to get used to the changes. Therefore, infants' contact with water for some time helps them finish the most important transition period better.

Secondly, it helps better develop infants' brains. Due to the stimulation that water poses on infants, their brains sense changes of different environments and respond to them. Thus, it contributes to the brain development and improves response capacity of brain.

Thirdly, it helps to develop infants' gastrointestinal digestive system. With the help of water, infants' digestive organs develop better. Thus, it will enhance the gastrointestinal absorption and make them heavier.

Fourthly, the buoyancy of water also eliminates its gravity on the infants' vascular loop load and reduces heart burdens. Thus, it is helpful to the rapid and healthy growth of infants.

However, as infants are weak and strange to water environment. If you are not aware of safe operations, negative effects may happen. Therefore, when infants are swimming, the following work needs to be considered: firstly, you need to follow doctor's arrangements and advices, and let them swim according to health conditions; secondly,

water environment needs to be controlled, along with temperature and quality; thirdly, swim for 10-15 minutes.

3.2 Promotion in Fitness of the Elderly

With the development of economy and progress of science, people live longer and the elderly increase in large numbers. As China has entered the aging society, it is vital to appreciate the popularity and development of old people's sports. Nowadays, an important factor that threatens the elderly is the fracture and paralysis that results from osteoporosis. It has become a serious social problem and got attention by governments and health workers for old people. Judging from medical studies, human bones grow with ages and reach peaks between ages of 35-40. When they become old, bones decline with ages. Nowadays, there is no scientific way to stabilize bone mass in the medical field. Therefore, it is quite important for the elderly to prevent osteoporosis. Swimming improves body's anti-aging ability effectively. Study found that long time swimming promotes the density and mineral content of bones. Regardless of gender differences, old people who keep exercising for more than 4 years are better than controls in bone density and mineral content. The statistical analysis $P < 0.01$ proves that swimming effectively prevents bone losses. Moreover, considering the relatively small physical activity of the old, swimming is a perfect non-traumatic campaign. First of all, swimming is a systemic sport. While doing sports, mechanical stress of bones comes out due to water stress. Thus, it stimulates the osteoblast activity to improve bone mass of the elderly and perfectly prevents osteoporosis.

3.3 Role in Promoting the Fitness of Pregnant Women

Human's health can never be separated from congenital genetic factors. Meanwhile, mother's health during pregnancy is critical to fetus's healthy growth. Appropriate swimming during pregnancy has positive effects on herself and fetus. It promotes healthy development of fetus and avoids the hypoxic conditions of fetal life. Meanwhile, it has active impacts on the development of visceral organs. Moreover, it is good for psychological development. In the 4th month of pregnancy, stomach becomes bigger and pains appear in the spine and pelvis area.

With blood's concentration on the abdomen, mothers prone to prenatal symptoms such as constipation, anemia and ailment. It is good to

promote blood circulation of pregnant women with water massage through swimming. Moreover, this enhances metabolism and muscle strength to ease the pain of waist and spine. Furthermore, it corrects abnormal fetal position and contributes to normal childbirth.

4 CONCLUSIONS

In all, with scientific theory, swimming properly and exercising regularly effectively strengthens cardiovascular, respiratory system, regulation of body temperature and immunity. Meanwhile, it helps to shape body, regulate psychology and exercise will. Moreover, scientific swimming contributes to fitness of infants, the elderly and pregnant women. Due to the benefits to fitness, swimming needs promotion and popularization in society. Improvement and development of modern swimming venues and infrastructures will support the development of mental health of Chinese people.

REFERENCES

- Li Jiaqi. Discussion on Swimming's Role in Cultivating College Students' Sound Psychological Quality. *Science and Technology of Stationery and Sporting Goods*. 2011(12):121-122
- Jiang Kailai, Song Jinjiu. Analysis on the Value of Swimming in Fitness. *Science and Technology of Stationery and Sporting Goods*. 2013(10):152
- Hu Zhuanyan. Study on Present Situation and Countermeasures of Winter Sport in Korla, Xinjiang. *Contemporary Sports Technology*. 2014(15):182-183