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Meditative Swimming: A Holisitc Alternative to the Competitive Model

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ABSTRACT

Swimming is widely regarded as one of the best sports for health, offering benefits such as improved cardiovascular fitness, muscle strength, and pulmonary function. Competitive swimming, the dominant paradigm in most swimming clubs, is often seen as the standard for "proper" technique. However while swimming clubs teach correct stroke techniques, the competition-focused approach may have significant drawbacks. Swimming for speed can lead to suboptimal aesthetics, hyperventilation with incomplete exhalation, inefficiency caused by frequent head-lifting for breathing, and a style that works against rather than with water resistance. This article proposes an alternative paradigm for swimming: meditative or organic swimming. This approach emphasizes full exhalation, efficiency over speed, extended time underwater, reduced breathing frequency, relaxation, and a deeper connection with the water. By incorporating these elements alongside proper stroke techniques, meditative swimming could enhance both the health benefits and enjoyment of the sport. It provides a compelling option for those who are deterred by the competitive model but still seek a professional and health-oriented approach to swimming.

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INTRODUCTION

Swimming is widely regarded as an ideal sport for overall health, boasting a long-standing tradition and global popularity. Its health benefits are extensive, encompassing cardiovascular conditioning, muscle strengthening, and lung capacity training (Cumming, 2017). Additionally, swimming is a joint-friendly exercise suitable for people of all ages and abilities (Barker et al., 2014). Beyond physical benefits, there is growing evidence supporting swimming's positive effects on mental well-being (Cumming, 2017), stress reduction (Chen et al., 2015), and overall mental health (Howley, 2021; Tang et al., 2022). However, the way swimming is practiced varies greatly. At one end of the spectrum, recreational swimming is often a casual activity, characterized by minimal face immersion, reliance on basic strokes like breaststroke, and limited attention to proper technique. At the other extreme lies competitive swimming, where participants undergo rigorous training regimens aimed at preparing for competitions. While many people swim as a leisurely pastime, often without adequate technique to fully reap the health benefits, the prevailing notion of "proper swimming" is typically associated with the competitive model practiced in swimming clubs. In this article, I argue that even professional swimmers training at clubs—where proper technique is emphasized and swimming is treated as a serious sport—may fall short of realizing the full spectrum of health benefits that swimming might offer. The prevailing paradigm of competitive swimming, with its emphasis on speed and rigorous training for events, has inherent drawbacks. This focus often compromises the potential for swimming to be practiced in a holistic and physiologically balanced manner. The absence of the positive psychological effects of swimming, when it is pursued for competition rather than as a leisure activity, further supports the idea that competitive swimming may compromise its holistic benefits (Szabo et al., 2019). By prioritizing competition, the sport may inadvertently neglect aspects that optimize swimming for both physical and mental well-being.

Competitive Swimming

The dominant paradigm of competitive swimming, centered on speed and performance, often introduces drawbacks that compromise the essence of efficient and graceful swimming. Training for competition frequently prioritizes rapid movements and frequent breaths, which can disrupt body alignment, increase water resistance, and detract from the aesthetic fluidity of the strokes. This focus not only reduces efficiency but also risks overlooking the holistic benefits of swimming, such as relaxation, connection with the water, and mindful breathing. Ultimately, the competitive approach may inadvertently undermine the activity's potential as a harmonious, health-oriented practice.

Downsides of competitive swimming.

Competitive swimming, while widely regarded as a pinnacle of swimming excellence, is not without its potential downsides. One notable concern is competitive swimming's association with physical and psychological side effects, such as an increased

risk of exercise-induced asthma (Päivinen et al., 2021). While factors like the swimming pool environment and chlorine exposure may contribute (Drobnic et al., 1996), they are unlikely to be the sole explanation for the respiratory symptoms frequently observed in competitive swimmers (Päivinen et al., 2021). I propose that incomplete exhalation and rapid breathing frequency, both prevalent in competitive swimming, may contribute to the exacerbation of these symptoms. Additionally, the psychological stress and pressure inherent in competition-focused sports can further impact mental health (McCluskey, 2022). Beyond these physiological side effects, there are broader critiques of the competitive swimming paradigm that extend beyond personal health impacts. These include:

1. **Incomplete Exhalation and Hyperventilation**: Competitive swimming often emphasizes quick inhalation and frequent breathing combined with incomplete exhalation. Disrupting the natural breathing rhythm and may finally represent a form of hyperventilation.

2. **Aesthetic Compromises**: The pursuit of speed frequently results in a swimming style that is less fluid and aesthetically pleasing. Movements can appear rushed and disconnected, detracting from the gracefulness of the activity.

3. **Overwater Dominance**: Competitive swimmers typically prioritize speed over underwater efficiency, resulting in frequent surfacing for breath. This not only disrupts body alignment but also works against water resistance rather than harmonizing with it.

4. **Inefficiency**: Frequent breath-taking slows swimmers down, reducing energy efficiency. The high energetic demands of competitive swimming may not always translate into sustainable or optimal performance for non-competitive swimmers.

5. **Disconnection from the Water**: Competitive swimming can foster an antagonistic relationship with the water, as the swimmer battles resistance to maximize speed. This may diminish the sense of immersion and harmony that can make swimming an inherently meditative and enjoyable activity.

6. **Deterrence for Some Swimmers**: The competitive paradigm may deter individuals who enjoy being in the water but are not motivated by speed or competition. This approach excludes those who might seek alternative benefits from swimming, such as relaxation, health, and connection with the water.

By highlighting these disadvantages, we open the door to exploring alternative paradigms that prioritize efficiency, connection, and health, offering a more inclusive and holistic approach to swimming.

Meditative or Organic Swimming

This article proposes an alternative paradigm for the swimming sport that moves beyond the competitive model: a style that can be termed *organic* or *meditative*

swimming. This approach emphasizes harmony and fluidity in the water rather than speed as the defining objective of swimming. The core principle of meditative swimming is to adapt and optimize movement in water by maximizing efficiency. Efficiency, in this context, means leveraging the natural properties of water to minimize resistance and enhance flow. This involves:

- **Streamlining**: Focusing on body alignment and technique to reduce drag and glide smoothly through the water.
- **Effort Reduction**: Striking a balance between speed and minimal energy expenditure, prioritizing endurance over bursts of speed.
- **Controlled Breathing**: Ensuring a calm and near-complete exhalation to maintain a relaxed state and improve respiratory efficiency.

This style closely parallels the principles of long-distance swimming but incorporates an additional layer of mindfulness, with a particular focus on controlled breathing. This approach aligns with the concept of reduced or controlled breathing, initially proposed by Counsilman (1975) for its hypoxic training effects on swimmers. Reduced breathing swim training, which can induce hypoxemic conditions (Woorons et al., 2014), offers potential benefits linked to hypoxic adaptation (Kapus et al., 2005; Lavin et al., 2015). However, hypoxemia is primarily achieved through prolonged exhalation (Toubekis et al., 2017). Unlike its application in competition-oriented training, meditative swimming reframes this technique within a contemplative framework, emphasizing mindfulness and relaxation over competition. Meditative swimming seeks a harmonious balance in physical movement and breathing, fostering a state of flow that enables the swimmer to fully—or nearly fully—exhale in a calm, deliberate manner. To achieve this, the speed of movement and overall pace in the water may be consciously reduced, creating conditions that support relaxed and complete breathing. By integrating these principles, meditative swimming may not only enhance the physiological benefits, such as improved breathing efficiency and reduced stress, but also transforms the activity into a contemplative, almost meditative experience. This holistic approach could amplify the enjoyment and health benefits of swimming, making it a unique and fulfilling practice. The key aspects of meditative swimming include:

1. Reduced Breathing Frequency and Extended Time Underwater: This principle enhances swimming efficiency by optimizing streamline shape, allowing swimmers to glide more smoothly through the water. The reduced breathing frequency involves increasing the number of strokes taken before each breath:

- **Breaststroke**: Performing two or more strokes before surfacing for a breath, rather than the typical one stroke per breath.
- **Freestyle**: Incorporating three or more strokes between breaths to maintain rhythm and body alignment.

- **Butterfly Stroke**: Executing three or more dolphin kicks per breath to enhance flow and streamline efficiency. By applying this method i suggest to call this style whale instead of butterfly or dolphin. As the flow and rythm of the movements has got a complete different quality.

It is essential to adjust the breathing rhythm to individual physiology and comfort levels, as these vary between swimmers.

Backstroke, unique due to the absence of face immersion, still adheres to the principle of calm and controlled breathing. For a meditative variation, swimmers might experiment with:

Using a nose clip or diving goggles for backstroke with face immersion. Combining face-immersed backstroke with minimal arm movement or integrating breaststroke arm techniques for a slower, contemplative experience.

These adaptations encourage a mindful connection with the water, balancing efficient motion with a relaxed state of breathing.

2. Full Exhalation and Diaphragmatic breathing: Prioritizing complete exhalation over rapid inhalation promotes a more natural and relaxed breathing rhythm. To further enhance this calm breathing pattern, swimmers should focus on diaphragmatic breathing, which engages the diaphragm rather than relying on shallow chest breathing. Research suggests that diaphragmatic breathing may help reduce stress and promote relaxation (Hopper et al., 2019). Additionally, maintaining an abdominal breathing pattern while swimming could minimize passive drag, allowing for smoother and more efficient gliding through the water (Maruyama & Yanai, 2015).

3. Immersion and Flow: This style encourages swimmers to connect with the water, aiming for a mental and physical state of flow and balance, rather than striving for maximum speed.

The potential benefits of meditative swimming could unlock the full spectrum of what the sport has to offer:

1. **Enhanced Stress Reduction**: The slower and more controlled breathing rhythm could help calm the mind and body, offering a deeply relaxing experience.
2. **An Inclusive Alternative**: This style provides an appealing option for individuals who enjoy swimming but are deterred by the competitive focus of traditional training.

3. **Emphasis on Contemplation**: Meditative swimming highlights the tranquil and contemplative aspects of water and the act of swimming itself, enriching the swimmer's experience.
4. **Improved Breathing Training**: By focusing on exhalation and increasing CO_2 tolerance, this approach overlaps with practices in meditation and freediving, enhancing respiratory strength and endurance.
5. **Increased Swimming Pleasure**: Greater efficiency and an improved streamline shape, achieved through extended time underwater, can heighten the overall enjoyment of swimming.

Meditative swimming aims to offer a holistic approach that merges physical, mental, and emotional benefits, offering a compelling alternative to the speed-centric model of competitive swimming.

Discussion

This article does not advocate for the abolition of competitive swimming but rather calls for the establishment of an additional paradigm that complements it. Competitive swimming has its rightful place and value, offering a structured and goal-oriented approach to the sport. However, when competitive swimming becomes the sole serious approach to swimming, it risks steering the sport in a one-sided direction. The proposed style of organic swimming presents an alternative that does not seek to compete with competitive swimming but rather to enhance and balance it. Organic swimming could provide an inclusive option for individuals who enjoy the water but are deterred by the competition-focused model. It could also serve as a valuable complement within swimming clubs, enriching training regimens designed for competition. For example, integrating organic swimming principles into training could address imbalances, such as improper breathing patterns that arise from focusing solely on speed. The idea is to foster a dual culture within swimming clubs, where the pursuit of speed and competition exists alongside a more meditative and organic approach. This is not without precedent—similar dual paradigms can be observed in other sports, such as climbing. While climbing can be pursued competitively, many enthusiasts engage with it recreationally, valuing the experience, flow, and connection with the activity over competition. Furthermore, organic swimming aligns with practices focused on breathing and mindfulness.The emphasis on proper breath technique, efficient movement, and achieving a state of flow resonates with meditative practices that prioritize relaxation and breath control. By incorporating these principles, swimming can transcend its competitive framework and become a more holistic and inclusive activity that caters to a broader range of physical and mental well-being goals. In this sense, organic swimming not only complements competitive swimming but also expands the potential of the sport to benefit a wider community of swimmers, enriching their experience both in and out of the water.

Conclusion

The drawbacks of competitive swimming are multifaceted, as it represents only one interpretation of the sport. This article has outlined an alternative paradigm—meditative or organic swimming—that serves as a complementary approach to the competitive model. Integrating meditative swimming into the practices of swimming clubs could enhance the sport's appeal, enjoyment, and health benefits. By shifting the focus beyond speed and competition, towards contemplation and harmony with the water, meditative swimming unveils often-overlooked qualities that could deepen both the experience and the wellness potential of the activity. Organic swimming emphasizes connection, relaxation, and efficiency, offering an inclusive approach for those who may feel alienated by the competitive culture of swimming clubs. For many, the essence of swimming lies not in racing but in the joy of moving through water in a harmonious and mindful way. By embracing this complementary paradigm, swimming can evolve into a more holistic and inclusive sport, appealing to both competitive athletes and those seeking a meditative, health-focused, and enjoyable experience in the water.

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Data and Supplementary Material Accessibility

Due to the theoretical nature of this article there is no data, code, or supplementary material available for this manuscript.

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