

What is Taper?

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Author's note: The following article appeared in a bi-monthly newsletter and was intended to help all new families to the sport of swimming understand this important time of season. At the same time I was writing, I realized that many of the Senior swimmers that I directly coached did not know the basis of a taper and its true intentions. While there is nothing ground breaking in it's content, I believe the article puts the whole taper concept into something the swimmers could/would understand. I hope you will find it useful.

By Allan Williams, Senior Coach, Parkway Swim Club, St. Louis, MO, ASCA Level 2

The word taper in swimming is a word that we all come to know early in our swimming career. I'm not too sure whether or not we all really know what tapering is and why it is used. The following is a working definition of what we will be covering; a taper is "the reduction of workload during a period immediately prior to a major competition." As a swimmer goes through their swimming career they may encounter different ways to accomplish a taper. There is no one way to do a taper, nor a magic formula. One of the most important things that a swimmer must do during a taper, any taper, is to believe in themselves, their abilities, and the work they have done over the course of the season. They must also instill the belief in their coach as a professional with the swimmers best interest always in mind. So, with that said, let's start to look at what this concept of a taper is.

The taper is used in swimming by groups of all ages and is a common practice everywhere. A taper is the need to recover following prolonged periods of high-volume/high-intensity training. The purpose of the taper is to allow the swimmer to adapt to, or supercompensate for the level of work accomplished in the training program.

(Supercompensation can be defined as optimal and maximal recovery). An important ingredient of the taper is the work that has gone into swimming before the taper even starts. Tapering allows the swimmer to adapt to perform as the result of regular season training. What we as coaches are trying to say is that the work you do during the season is like money you place in a bank; at the end of the season a swimmer can go to that bank, collect all of his/her money with interest as the pay-off for the hard work done in season. Bottom line, you can get what you put in and more!!

During a taper the work volume can be reduced along with the intensity of work. The frequency of practices and focus during a

practice should remain at the same level as the regular season. The reduction in volume of work will not result in a decreased performance ability. All performance factors are maintained at this important period of time. The amount of work volume dropped during the taper may/will vary from coach to coach - swimmer to swimmer. This only plays a small part in heightening performance capacity. The length of a taper will vary too. As studies by ICAR (International Center For Aquatic Research) have shown, peak performance can be accomplished at a 60 percent reduction of work volume. This can be done over a long period of time or a relatively short period. Studies also show the same taper can be effective for the high volume and lower volume groups.

During the first three weeks of a taper (according to ICAR) changes that occurred were "increases in power, neuromuscular efficiency, anaerobic contribution of the swim, fast twitch muscle recruitment, and mechanical efficiency."

Shaving down has been a long-time companion of the taper. Shaving down for a swim meet is for gaining an advantage of a few tenths of a second. Just what does shaving body hair do? Shaving results in faster swims independent of training. The advantages of shaving are related to a decrease in drag to be overcome by a swimmer. The final result is that less power application in the pull pattern is required to overcome that drag.

The final aspects of a taper, and by far not the least, is the mental side. In the final stages of a season a positive self image is needed to help create the desire to succeed and have the confidence to do so. Many swimmers may feel as if they are under stress at this time. Mentally or emotionally they may be trying to solve problems that come about during school or training. These problems may be amplified at this time. Parents tread carefully. Sometimes too much motivation or too much anxiety for results, or pressure by parents/coach can come into play in a negative way. It is important to have a clear mental picture of technique before the swim is executed successfully. Experiments in several sports have shown that it is possible to improve performance by sitting in a chair relaxed for five minutes a day and visualizing one's self performing desired techniques.

Now you are ready to go out and execute your taper taking full advantage of the knowledge of what it is you are about to do. You have that winning edge over your opponent and the clock. Be focused, be aware of your body and most importantly be confident that you *will* do well!!