

Science-Based Performance Improvement Training

Using the WAVA Tables

July 5, 2006

The WAVA tables are tool for bench marking your performance level.

There are several other tables and formulas available; but, their use is limited to a short time span, e.g., one racing season for runners older than about 45. Dr. Daniels' "Daniels Running Formula" uses a factor he calls VDOT, which is derived from a table of finish times for various race distances. Dr. Noakes has several in his book "Lore of Running."

The WAVA tables are unique as they utilize the age factor [8 thru 100] race distances [5K thru 100K] and gender. They are particularly useful for situations like this. Assume you haven't run a marathon for 10 years and want to estimate your time for the MCM. You've been training well and are good shape. Your most recent 10K time was 44:15 and your age is 46. The WAVA tables show you are a 66% runner. Now look up the time for 66%, male, age 46; your projected time is 3:24. Now you can make a realistic race plan.

The WAVA% is a value for your age, gender, and race distance relative to a mathematically derived ultimate performance [100%] for the same parameters. The WAVA% tables were empirically determined and are very accurate. Assume your WAVA% is 58% for a 10K, then it will also be close to 58% for all other distances.

A 100% WAVA value is a mathematical projection of the ultimate performance for someone, your age and gender for a given distance. World records are generally about 98% to 99%. Walking at a 15minute/mile pace is about 32%. There is no relationship between your WAVA% and percentage of people who run faster or slower than you. The relationship is strictly a percentage of your speed relative to the fastest person ever for your age and distance.

An interesting assessment of your past training methods can be made by comparing your WAVA%s for the various distances, e.g., 5K, 8K, 10K, 10miler and marathon. If your marathon WAVA% is smaller than your shorter races, it is a clear indication that you probably did not properly train your fatigue resistance [CG] **and/or** you may have been slightly overtrained **and/or** tactically you ran a poor race. Assuming you followed the material in "Fundamentals" and "Practical Considerations," the reason for my assertion should be obvious. Please reread "Your Marathon WAVA% as it Relates to Shorter Race Distances," in "Practical Considerations" to refresh your memory.

I recommend everyone who races keep track of their WAVA% for every race. It is a crucial tool for race planning. And, it is a good way to monitor performance improvement and to detect if you are starting to get into overtraining conditions.

The data was originally compiled by the World Association of Veteran Athletes. WAVA has been disbanded and the World Masters Association [WMA] has assumed responsibility.

Use this link to determine your WAVA% [WAVA Calculator](#). This calculator uses the 2006 version.

Later in the series, I'll cover how to use your WAVA% for detailed race planning.