

# What Makes a Successful Luge Athlete?

## Passion, Desire, Commitment and Preparation

In order to be successful in any activity, an athlete must love what they're doing. Natural talent is certainly a benefit, but it will only take an athlete so far. In order to succeed at the highest levels, an athlete must possess the innate talent required to succeed in their sport and have a natural desire to nurture those talents to their furthest extent.

Basically, if you have the natural talent, love what you're doing and are totally committed, you have

the key ingredients to succeed. Luge is a sport that is timed to 1/1000<sup>th</sup> of a second, so even the smallest mistakes or weaknesses can literally mean the difference between winning and losing. The women's gold and silver medal at the 1998 Winter Olympics in Nagano, Japan were separated by 2/1000<sup>th</sup>'s of a second after almost three and a half minutes of total racing time.

It is often said that luge races are won in the summer, not in the winter, and there is a lot of truth to that statement. The preparation that gives an athlete a fast, powerful start, or strong neck muscles in order to have optimal aerodynamic position on the sled, is learned and practiced during the off season. An athlete's commitment and desire is often tested in the middle of July when it is 100 degrees outside and the first race of the season seems a long time away. This is when the best become champions; when 4<sup>th</sup> place becomes first place. Those athletes who love the sport of luge and commit 100% focus maximize their chance to succeed.



## Size

Since luge is a gravity based sport, in general, it's beneficial to be somewhat taller and heavier. The extra weight helps propel the sled as it accelerates downhill; but having said that, the extra weight needs to be lean, muscle weight as opposed to adipose tissue (fat weight). Muscle tissue, by volume, is heavier than fat. It provides no assistance at all and simply acts as dead weight, which the athlete must then overcome during the start motion.

Being taller generally means an athlete will have longer arms or “levers” which will also be beneficial at the start. Generally, the longer an athlete can grip the start handles, the more opportunity there is for the athlete to accelerate the sled and have a faster start. While proper technique is, of course, also critical to a fast start, long levers can help as well.

Having pointed out the optimal traits for an “ideal” luge athlete, it must be said that there is no ideal size or weight template that will ensure an athlete will be successful. The perfect example of this is 5-time Olympic medallist Georg Hackl who weighs 180 lbs. and stands 5' 8" tall. The bottom line....the athlete with the best driving skills, the ability to relax on the sled, a fast start, the best preparation, and a good work ethic, will win.

## Age

To excel in any sport or activity at its highest level, the specific skills must be practiced and refined repetitively. This generally takes place over a period of years. For this reason, the best luge athletes in the world generally start sliding at a very young age. In Europe, where luge style sleds are used for recreational sliding as well as competitively, kids have their first ever sliding experience in the “luge position” (feet first, stomach up). Their first sliding may take place before they can even walk!

In America, recreational sliding is done on Flexible Flyer-type sleds (head first, stomach down), the opposite form to what Europeans know and are familiar. When it comes time to



introduce luge to an American kid, generally between the ages of 11 & 14, they must re-learn the skill completely. To make it simple, the younger an athlete can start luge, the better.

wide participation base, kids who compete in sports (any sports) will generally have at least some of the athletic skills that will translate well to luge.

### **Kinesthetic Awareness**

Potential luge athletes who are regular participants in other sports will generally have at least some degree of understanding of how their body moves through space. Since luge is a high-speed sport requiring relaxation and quick, subtle reactions, athletes who participate in sports like gymnastics, bmx, skateboarding, swimming or snow boarding, to name a few, may be good candidates. These are all athletes who have good coordination and are able to isolate their body parts for specific movements.



### **Work Ethic**

Contrary to popular belief, luge is a year round sport and not an activity that happens every four years for 2 weeks. It requires as much, if not more, hard work during the off-season as in the winter sliding season. An athlete needs to possess total dedication year round if they want to succeed and be able to win medals at the international level. For every 50 second run on the track, athletes will spend hours in physical conditioning workouts or working on their sled. Success requires total preparation and commitment.

## Strength

Good upper body strength is critical to being a good luge athlete. In luge, the start is one of the most important parts of the run because it is the only time the athlete actually has any control over how fast the sled is accelerating. In addition, it requires a high degree of strength to drive the sled down the track and fight the 2-5 g-forces an athlete experiences in curves. Good neck, upper body, stomach and leg strength are all critical during various stages of the luge run.

## Power

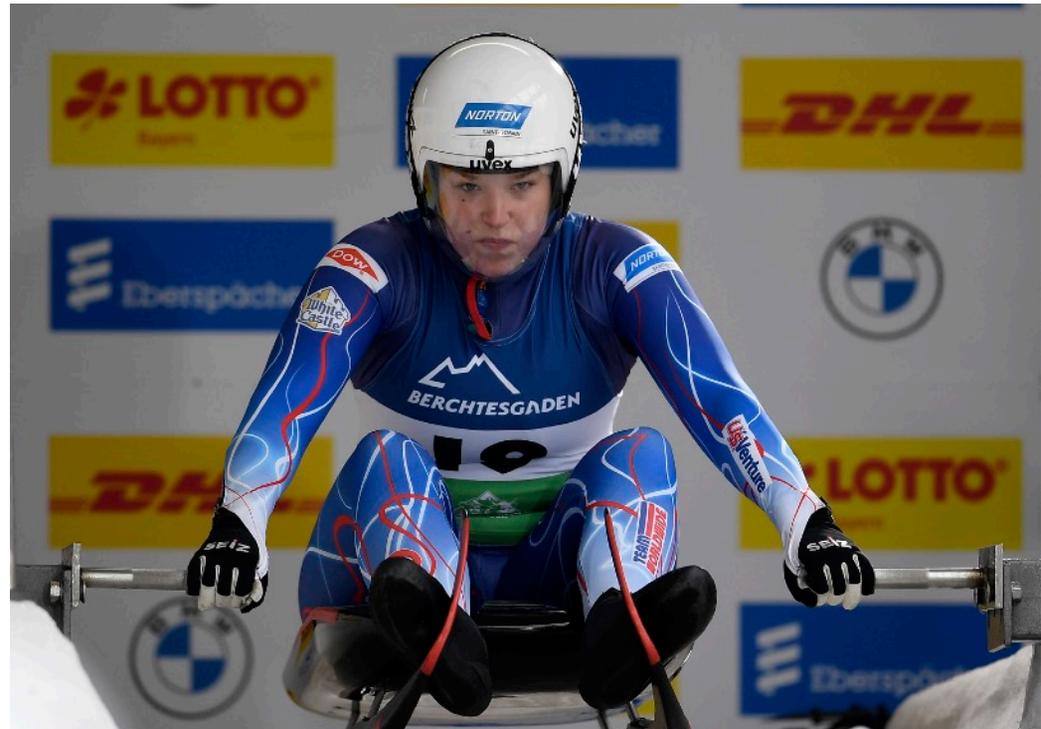
In addition to upper body strength, upper body power is critical. The ability to be explosive and accelerate the sled over a short distance during the start is critical to achieving the maximum speed possible at release of the start handles.

## Flexibility

Full body flexibility is important, again, mostly for the luge start. Good flexibility allows the athlete to stretch further into the “compression” phase of the start motion, which provides a longer distance of travel at the handles and, therefore, a longer opportunity to increase the acceleration of the sled.

## Relaxation

“Relaxing” at 90 mph is a relative term, but an athlete who can remain calm and relaxed on the sled has a tremendous advantage. After all, steering a luge sled is performed by putting pressure on certain parts of the sled and every steering



input is essentially “braking” or slowing the sled down. When an athlete is not relaxed or is tense in a certain part of their body, the sled acts more as a solid unit and may “cut” ice rather than flowing on and off the curves.

### “Feel”

There is an inherent skill in luge that separates a middle of the pack finish from a podium finish and that is an athlete’s “feel” for sliding. This skill can be learned or coached to some degree, but is generally something an athlete either has or doesn’t. For example, going into a curve, an athlete must prepare the sled to go from the flat straightaway onto a vertical banked wall. This is done by un-weighting the uphill runner or “pre -rolling” before the sled hits the beginning radius or “dished” profile of the curve. Done correctly, this can add up to a tremendous amount of time over the course of 14 curves during a 50 second run. It is an extremely subtle movement and is difficult to even see when done correctly. This is just one example of having the right “feel” for the sled. Others might include knowing how much steering input is enough without steering too much; or perhaps anticipating when the sled is about to get “offline” or skid and correcting it before it even happens; or simply knowing the right time to inhale and exhale.

All the qualities mentioned here (and more) add up to making a successful luge athlete. But even if an athlete possesses these qualities, there is no guarantee they will win races. So what is it then that ultimately makes an athlete an Olympic champion? The answer may be a combination of physical and mental skills, commitment, desire and yes.....a little luck.

