

Vallecito Standing Desks Q &A September 2015

1) What is history behind the Standing Desks Initiative at Vallecito? For years, Kelly and Juliet Starrett, owners of San Francisco Crossfit and Vallecito parents, have been recommending standing desks to adults through their work in the field of physical therapy. This is part of their practice and it's a part of what they recommend to their clients. Overall lifestyle is key to fitness and health, and when they talk about an optimal lifestyle for fitness, they talk about sleep, hydration, movement — and standing desks. If one wants to have good tissues and perform athletically or even just live life injury free, one needs to stand up. You're going to suffer orthopedic problems if you sit all the time and then try to stand up and try to play a game of pick up basketball or jump into a yoga class.

The Starretts are hardly the first to make the connection between sitting and poor health. There is a well-documented connection between sitting and various metabolic conditions. The World Health Organization considers physical inactivity the fourth leading cause of death, right behind obesity. Going back to 1994, the U.S. surgeon general predicted that sedentary living was going to be the next smoking. Good data (from the American Cancer Society and other major organizations) shows that, for women, sitting in excess of 6 hours per day increases your risk of death by 54 percent; for men, it's 70 percent.

As part of the research for his NYT bestselling book *Ready to Run*, Kelly Starrett noticed something about children and running: He observed that in pre-school and kindergarten, all kids run naturally and well, like miniature Kenyan marathon runners. They sprint. They pull hard. They run on the balls of their feet. By first grade, half the kids start heel striking. By second grade, they have noticeably dysfunctional running patterns. The key difference in the pre-school and regular school environment? Sitting. Children go from limited sitting as pre-schoolers to sitting the majority of the time as first graders. As a 6-year-old first grader, you are put into an environment that breeds dysfunctional movement patterns.

Kelly and Juliet saw this firsthand. A few years ago, they volunteered at field day. They always volunteer at the sack races, because of all the events, they think it's the most interesting and the most athletic. What they saw was really alarming to them: Many of the kids — most of them healthy and not obese — lacked the range of motion necessary to lift their legs to get into the sack (basically lift their knee to their chest, balanced). And then, when they would jump, they had such insufficient hip range of motion that they couldn't get into full extension with their bodies when they were jumping.

This wasn't an obesity issue. Most of these children were visibly healthy. The only thing they could conclude is that these children had lost a critical hip range of motion. And these are first to fifth graders! For us, it was obvious: This was a result of sitting. The only environmental load that could cause something like this in young kids was sitting too much. That was the first moment, the first spark of realization about what sitting was doing to children. At the time at field day, the Starretts didn't do anything about it. They just looked at each other and thought, "This is bad." They realized they had been recommending standing desks to adults for years and then sending their own kids off to sit all day.

They talked briefly that day to Mrs. Smith and she seemed receptive to the idea of standing desks. A few weeks later, they met with her to explain what they knew about physical inactivity and the impacts on children and learning and asked if she'd be willing to try a standing classroom, that they would fund it. She was open to the idea and the school started last August with 25 kids standing in Mrs. Roberts' 4th Grade. The students and Mrs. Roberts loved the desks, and the feedback from the kids and parents was excellent, so we added standing desks to the two other 4th Grade classrooms and also a 1st Grade

classroom. Again, the feedback from the teaching staff and the kids was all positive - they preferred the standing desks.

During the spring semester, the Starretts met with the entire school teaching staff and told them what they knew and had learned about the impact of too much sitting on health and learning. By this point, they had founded a non-profit called StandUPKids.org and partnered with Donors Choose, who was excited to work with them and use their combined leverage to bring standing desks to kids. They wanted the requests for standing desks to be teacher-driven and so Mrs. Smith asked each teacher if they wanted to move to standing desks for this next school year. After seeing the desks in action in the 4 classrooms last year, every teacher requested standing desks. We then launched a massive fundraising campaign to get 350 desks funded by the beginning of this school year.

2) How were the desks paid for?

They raised \$110,000 in an innovative fundraising campaign that involved 900 individual donors from all over the world, all of them who wanted to help create the first all standing school in the world. Tim Ferriss, multiple time NYT bestselling author and purveyor of the super-popular Tim Ferriss Podcast, donated \$10K of his own money to the project and made Vallecito Elementary School the subject of his annual birthday fundraiser, and his followers donated in droves. Kelly and Juliet amassed a list of "perks" for donating to the project including dinners at Michael Mina in San Francisco, consultations with Kelly, and other prizes. The project was fully funded in mid-July and the desks were ordered. It was the fourth largest project ever posted and funded on Donors Choose and had the single most number of individual donors they've ever seen.

2) What are the benefits of the standing desks?

We estimate that kids today are spending 85-90% of their waking hours sitting at school, doing homework, driving to and from school, and in front of screens to the detriment of their bodies and minds. Children cannot learn unless they can move, period. Studies show that kids are 12% more engaged when standing, which is 45 minutes more learning per school day. Kids burn an additional 15-35% more calories at a standing desk and also avoid the rash of orthopedic injuries and disease caused by sitting too much. Standing desks are a simple and elegant solution to the sitting epidemic, are healthier for kids, and create a dynamic, movement-rich classroom environment. There is more data and statistics on the website www.standupkids.org.

4) How long will it take for students to get used to the standing desks and build their stamina? It takes children (and adults) anywhere from 2 weeks to 2 months to fully adjust from sitting to standing. The Vallecito teachers encourage kids to listen to their bodies and take breaks by sitting on the floor or on a stool if they feel tired. Most teaching blocks are not more than 15-20 minutes and the physical environment is dynamic - our goal is to create a movement rich environment for kids, not to make them stand for 6 continuous hours. Last year, we noticed that at the beginning of the year, the kids clambered for the shared stools but, a few months in to school, they were barely used.

5) What benefits have teachers observed for their students?

The teachers at Vallecito have noticed increased student engagement, fewer behavior concerns and increased productivity due to the use of standing desks. The locking casters on the legs of the desks allow for easy flexible grouping and collaboration among students.

6) What is going to happen to the desks and chairs we used to have?

The desks and chairs that we no longer need have been made available first to other Dixie School District schools and then will be offered to local or international schools in need.