

Catch That Wave

— Susan Witter and Debra Huntsman-Lannom, PT

Kids surfing in DAFOs? This could originate only in Southern California!

It happens in Malibu, to be exact. Malibu, in western Los Angeles County, is known for its smooth, long wave sets. During the summer, when seas are calm enough, Malibu can provide a nice long ride for kids surfing in DAFOs.

Players

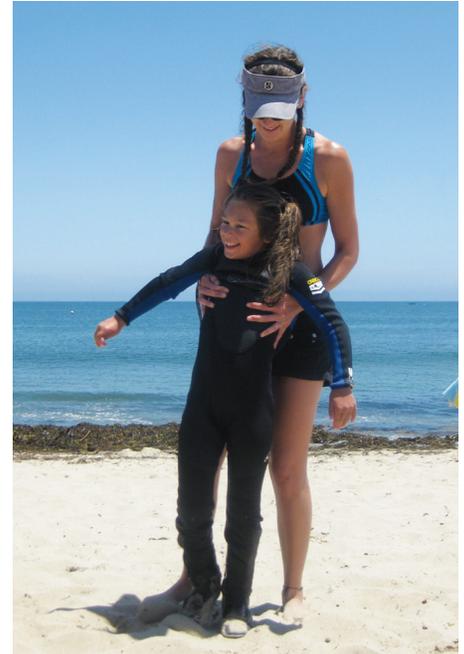
Debra Huntsman-Lannom, PT, has enlisted a professional surfer to use surfing as therapy for children with mobility challenges. Debra works largely with children who have cerebral palsy (CP). Her work is further specialized—she operates in the child’s natural environment (home, school, play areas, and so on) instead of therapy in a clinic or school facility. Think of the difference between running on a carefully-carpeted, smooth clinic floor and running over a grassy field.

One patient, Sylvia, is 10 years old and has spastic quadriplegia. In her daily mobility, she takes supported steps or uses a walker while wearing her DAFOs. (Her orthotist is Jim Dryden of Orthopliance Group in North Hollywood.) Sylvia is a fifth grader who loves school, has lots of friends, and loves Hannah Montana, the Jonas Brothers, High School Musical, and boys. She adores laughing and having fun, and she certainly loves to surf.

Last summer, Sylvia wore hinged DAFO 2s while surfing. The DAFOs give Sylvia a good base because they help her feet achieve good full surface contact with the surfboard. This helps her balance better on the board.

Surfing therapy isn’t for everyone, and it’s not about teaching kids to surf. It’s about giving them a very fun ride and helping them learn to balance. Every individual person has his/her own level of risk tolerance, whether CP is a factor or not, so some kids might be enthusiastic about surfing while others might not.

Kids with CP are especially challenged by muscle coordination and balance control. Building muscle strength and motor planning techniques are skills often integrated into a physical therapy program. That would make surfing an appropriate activity for meeting physical therapy goals. Debra finds that the kids who take to surfing are the ones who also love movement, moving through space, and roughhousing.



Sylvia is assisted in standing by an aide. Sylvia’s thrilled and ready to surf!



Therapy in the Natural Environment

In *Physical Therapy for Children* (Suzann K. Campbell; 3rd edition), a natural environment is described as “the environment in which the child actually participates, or environments in which children of similar age and social background participate.” Teaching of functional skills in natural environments generally improves the child’s ability to generalize skills naturally, and skills are more likely to be maintained by natural reinforcers and practice. When assumed prerequisite skills are practiced, research does not support improved measurable functional outcomes; i.e., practicing the prerequisite skills for surfing will not provide the same outcome as actually surfing and the experiences surrounding it. The focus is on PARTICIPATION and specific motor problem solving.

—Debra Huntsman-Lannom, PT

Getting the wetsuit boot on

Once Sylvia has all of her wetsuit on except for the boots, Debra dons Sylvia's DAFOs. Debra has made a slit in the back of the wetsuit boot, about halfway down its posterior. She wiggles the forefoot in. Then she gets the heel seated by folding down the upper part of the boot and wiggling the heel in. From there it's a cinch to unfold the upper part, and Sylvia is ready to ride! This kind of adaptation would work for simply wading in the water, too—a great mobility therapy activity.



Logistics

Sylvia wears a wetsuit while surfing, even though it's summer. Debra has devised a way to get a scuba-diving boot over the foot of a child wearing a DAFO—she slits the upper part of the boot's posterior and then rolls it up, something like a nylon stocking. (See sidebar.)

Getting into the wetsuit can be a real workout in itself. It's a good warmup activity for being on the water. So is walking in the sand. In fact, Sylvia has to make transitions through three kinds of surfaces before getting on the surfboard—dry sand, wet sand, and water. These are all excellent activities for building stability and strength.

Once in the water, the surfer lifts Sylvia onto the surfboard—a longboard, for the most stability and maneuvering room. Several helpers may bring the surfboard out past the shallows, while Sylvia, stomach down on surfboard, works on paddling (and on building upper body strength). When they are out far enough, her surfing partner catches a wave and stands up. He then assists Sylvia to stand. Some children are able to get up on their own, and others like Sylvia require help into standing. Once up, the surfer positions Sylvia for proper surfing technique and stands behind her to support her. Then they ride the waves.

A surfing session, ideally twice a week, might include an hour in the water. In that hour, Sylvia and her surfing partner might get seven to twelve rides. When the surfing lesson is over, they ride a wave to shore, where help is waiting to get Sylvia out of the water.

Benefits

The kids absolutely love this. Another of Debra's patients says, "This is the most fun I've had in my entire life!" Thus the surfing kiddos are super-motivated to do things like pushing up on their own, paddling, leaning to balance, and so on. Here is a wonderful illustration of how therapy in a natural environment—the places where children actually live—can be so very effective. Another benefit of physical therapy in the natural environment is that children become well-versed in problem-solving in the very places where they spend time and need to get around. The fact that the child is not in isolation, not even out on the surfboard, is another key benefit.

Other, even more profound factors make "surfing therapy" highly beneficial. Surfing requires constant shifting to find balance. Since the water is a three-dimensional moving surface—forward, up and down, and side to side—the child never stops sensing and adjusting position. This helps build sensory awareness and strength. So does paddling, especially in the upper body.

Surfers, as part of the team, are intuitively familiar with their (and their "passenger's") center of gravity, which helps in making fast, small adjustments in the right direction. Surfers are also highly attuned to the intense benefits of being in and around water, moving through lots of space, fresh air, great sunsets, and all of the ambient factors that bring a healing quality to the beach.

Of course, taking this on is a big leap of faith, especially for the parents. All of those concerned work first, and hard, on building trust among the group—the patient herself, family, the therapist, the surfer, and helpers. It helps that some of the parents have enjoyed surfing when young, or may still surf. The first session on the beach may find an anxious mom or dad, but it doesn't take long for everyone to relax into the joy of surfing.



Debra Huntsman-Lannom graduated from P.T. school at California State University–Northridge (CSUN) in 1979. She started her private practice in 1987. Debra has taught part time at CSUN in the Special Education Department for 11 years and in the Physical Therapy Program for the past five years. She is also trained in Neonatal Intensive Care Unit (NICU) and NICU followup, and she works per diem at Providence Tarzana Medical Center. You can reach her at debra.huntsman-lannom@csun.edu.

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