

It's Summer, Get Ready for Diabetes Camp!

Camps for youth and children with diabetes are invaluable.

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In the United States, one in every 500 children develops type 1 diabetes, and more than 176,000 American children struggle with maintaining optimal diabetes control every day.¹ Given the physical and emotional strains of managing diabetes day in and day out, diabetes camp offers a much-needed respite from a world where children with diabetes are all too often singled out as being “different.” In 1925, Dr. Leonard F.C. Wendt established the first camp for children with diabetes in Michigan.² Since then, more than 360 diabetes camps have been established all over the world, serving more than 15,000 children with diabetes each summer.^{2,3}

Although the primary mission of diabetes camp is to provide a safe traditional camping experience for children with diabetes, camp serves a number of additionally important roles. Diabetes camp (1) fosters an improved sense of community and friendship among children with type 1 diabetes and their physicians, (2) teaches diabetes management skills in non-traditional settings, (3) provides a unique opportunity to perform clinical research, (4) provides real-world diabetes experience to volunteers, medical students, and residents (many of whom choose a career in pediatric endocrinology after attending diabetes camps), and (5) reinvigorates us all to push our patients to maintain the best possible control.²

WHY DIABETES CAMP?

Diabetes camp provides a traditional summer camp experience for a subset of children whose parents are often hesitant to allow them to attend traditional summer camp due to the real and perceived lack of experience many traditional camps have in managing children with diabetes.

That said, to the casual observer, children at diabetes camp are indistinguishable from children at traditional summer camp, spending the vast majority of their time socializing, preparing for camp skits, and participating in sports and waterfront activities.

Diabetes camp is unique in providing the child with type 1 diabetes the all-too-uncommon experience of being just like everyone else. Given that all children attending camp have diabetes, taking breaks from swimming to test blood glucose, counting carbohydrates, and even going to the bathroom to test for ketones, are seen by the children as the norm, rather than activities that single them out. In this way, diabetes camp provides children an opportunity to see that many other children are living with diabetes and working their way through the same challenges of lows, highs, finger pricks, and shots. In overcoming these challenges together, many campers form long-lasting friendships with cabin-mates, that serve to provide a much-needed year-round support system. With the widespread availability and popularity of e-mail and instant messaging among children and teens, continuation of these summertime friendships throughout the year is all the more possible.

DIABETES EDUCATION

The specialized camp setting also allows for age-appropriate teaching of diabetes self-management skills. With topics such as blood glucose monitoring, carbohydrate counting, and pump management, doctors and volunteers can tailor age-appropriate curricula specific to the needs of campers. In fact, although there is a relative paucity of data documenting the benefits of diabetes camp, most pediatric endocrinologists believe camp to be of immense value, and

several recent studies have demonstrated that camp attendance correlates with improvement in glycemic control^{4,5} and that diabetes knowledge increases following camp attendance.⁴

Despite the lack of published data, the presence of highly trained volunteers and physicians undoubtedly allows many children attending diabetes camp to make tremendous progress in self-management over a short period of time. Not uncommonly, young diabetes campers receive a standing ovation from a crowd of friends, doctors, and nurses after giving their own insulin injection for the first time. In this way, children are able to attain a higher degree of independence and self-management in a safe and supportive setting.

CAMP GIVES BACK

In addition to providing a much-needed service to children with diabetes, diabetes camp often affords undergraduates the opportunity to discover their passion for medicine and allows pharmacy, nursing, and medical students to gain extensive experience in working with a pediatric population and to learn about diabetes care. From different insulin regimens, to management of insulin pumps, diagnosis of blood glucose extremes, and treatment of diabetic ketoacidosis, medical volunteers receive an intensive, hands-on education in diabetes management that cannot be replicated in a hospital, clinic, or classroom.

Because diabetes camp creates a setting far removed from the typical clinic, it affords physicians and children the opportunity to establish exceptionally strong bonds that hopefully translate into improvements in long-term diabetes control. Physicians at camp get to know their patients far better than they do in 30-minute clinic sessions and, as such, gain better perspective as to their individual personalities and the intricacies of their daily diabetes management. Whether it's playing softball together, competing in canoe races, or just chatting in the cafeteria, the experiences physicians and campers create together, help everyone involved understand and adapt to children's specific diabetes management issues.

RESEARCH AT DIABETES CAMP

Diabetes camp provides a unique environment for performing clinical research. Where else can one find 150 children with type 1 diabetes (and their family members) all in the same location at the same time? It is imperative that camp-based research be performed in a way that is minimally invasive to the camping experience. Before any camp-based research can begin, approval of the camp board of directors must be obtained, institutional review board approval must be established, and informed consent from parents as well as assent from the children must be documented.² Following this guidance, many studies have suc-

cessfully been completed in their entirety at diabetes camp, while many others have relied heavily on samples obtained from diabetes camp to achieve their goals.

One example of research that shares a symbiotic relationship with diabetes camp is the type 1 diabetes TrialNet. Funded by the National Institutes of Health, TrialNet is a consortium of researchers across the North America, Europe, and Australia performing large-scale type 1 diabetes prediction, prevention, and intervention studies. Diabetes camp serves a critical role in allowing TrialNet researchers to inform new-onset patients of ongoing intervention trials, and to approach potentially high-risk family members of diabetes patients so they can be screened for prediction and prevention trials. In return, family members get the opportunity to participate in the research process and collect information on the latest advances in diabetes research. Whether it's screening for diabetes risk in family members, testing the efficacy of new devices, investigating psychosocial mediators of glycemic control, or studying the benefits of the camp experience itself, diabetes camp is an incredible resource for diabetes research.⁶

Diabetes camp creates an environment that provides myriad benefits to patients, volunteers, and physicians alike by fostering an environment of community and friendship, providing meaningful diabetes education, and creating a unique opportunity for research. As you get ready to finalize your own summer plans, we urge you to promote diabetes camp to your patients and consider volunteering at diabetes camp yourself. You may just rediscover why you fell in love with caring for kids with diabetes in the first place! ■

To learn more about diabetes camps, visit: www.diabetes-camps.org; www.diabetes.org/communityprograms-and-localevents/diabetescamps.jsp; and www.floridadiabetes-camp.org.

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