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# Developing a Support Group for Adolescents with Insulin-Dependent Diabetes Mellitus using an Outdoor Adventure Educational Modality

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Developing a Support Group for Adolescents with Insulin-Dependent Diabetes Mellitus using an Outdoor Adventure Educational Modality

by

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# Abstract

# Tara Lynch

Developing a Support Group for Adolescents with Insulin-Dependent

Diabetes Mellitus using an Outdoor Adventure Educational Modality

This independent study details the group process aspects of creating an outdoor adventure based support group for adolescents living with insulin-dependent diabetes mellitus (IDDM). A review of previous outdoor adventure programs is included, followed by a rationale for the new material. The developmental assessment of teens living with IDDM identifies a need for greater self-confidence, increased independence, and social support. To meet this need, a program that includes aspects of team building, personal challenge, and problem-solving has been created.

#### Rationale

Having a chronic illness, such as diabetes, "is associated with an increased risk of psychological and behavioral problems" (Goh, 1999, p.1). This is because in addition to the "normative stressors associated with adolescence, adolescents with diabetes experience additional, non-normative stressors such as serious dietary and activity restrictions, new challenges to separation from parents, and body image issues" (Obeidallah & Hauser, 1999, p. 103). Some of the psychological problems that are common with chronic illness are low self-esteem and feelings of isolation (Goh, 1999). These issues are particularly poignant during adolescence because the needs of teens are often not fully met in the presence of diabetes. When a child has diabetes they often may not feel competent, have fewer positive interactions with peers, and may not fully develop the definition of self. This can lead to psychosocial hardship for the teen and the family.

Psychosocial hardships revolve around the constant vigilance and daily hassles needed to maintain a chronic illness, internal feelings of self-worth, and the development of relationships and boundaries with family and friends. The required behavior and planning is exactly opposite from many teens' nature. "Teens want to be spontaneous-to be able to do new things, eat things, and try things" (JDRF Helping, 2005, para. 15), on a whim whenever they feel like it. This is a part of their need for independence. The demands of diabetes often "force children into dependent roles in which they must relinquish control and subsequently question their sense of self-worth. Thus the experience of chronic illness often opposes children's developmental striving for independence" (Thomas & Gaslin, 2001, p. 256). This breakdown of the striving for

independence or the feeling of complete dependence can influence the relationships between a teen and parent. Only when the child feels more individual and competent, can he or she fully examine and develop an appropriate relationship with his or her parents. Teenagers with a chronic illness also have to work hard to develop meaningful friendships.

A support group will help members work through challenges together to develop trust and relationship skills. In addition, "exposure to other teens with diabetes can change their attitudes about self-care and responsibility dramatically" (Atchison, 1998, p. 2). A support group is especially effective for adolescents because it "bridges the formal-informal dichotomy by promoting mutual aid with the help of a non-authoritarian professional leader" (Vugia, 1991, p.94).

Outdoor adventure education is chosen for the modality because of its attractiveness to the teen population and its effectiveness in developing self-esteem, peer relationships, and leadership. The attractiveness helps "provide a means for adolescents to overcome initial resistance to treatment" (Marx, 1988, p.517). Cognitively, "teens base their decisions on the way they perceive an activity right now, not on the long term implications of those decisions" (Atchison, 1998, p. 1). In an outdoor adventure group, the teens develop problem-solving skills to use before doing an activity. They will do the activity and then will process how their thoughts and decisions affected their activity and discuss what later implications may arise. "This kind of experiential education strives to achieve in a very concrete, action-oriented, immediate way what traditional clinical attempts to achieve (and with teens, often fails) in an abstract, verbal, measured fashion" (Marx, 1988, p.518).

# Literature Review

It is well supported that having a chronic illness, such as diabetes, "is associated with an increased risk of psychological and behavioral problems." (Goh, 1999, p.1) This is because in addition to the "normative stressors associated with adolescence, adolescents with diabetes experience additional, non-normative stressors such as serious dietary and activity restrictions, new challenges to separation from parents, and body image issues" (Obeidallah & Hauser, 1999, p. 103). There are numerous support programs in place to care for their needs. There are camps, online chat rooms, and discussion support groups. It is believed, however, that an extended outdoor adventure education group for adolescents with diabetes could reach and support this population in a way that is not being done. This study reviews the history of outdoor adventure education programs, namely the Outward Bound organization, since it is generally regarded as the standard for outdoor education. It will examine the literature that supports why outdoor education would be a positive additional resource available to teens with insulin-dependent diabetes mellitus (IDDM). It will also assess what aspects of the program may not be effective and provide steps that organizers can take in creating an IDDM specific program to improve them.

Simply defined, "outdoor adventure education (OAE) involves direct and purposeful exposure to adventurous activities in an effort to facilitate both intra-and interpersonal growth" (Sheard & Golby, 2006, p. 189). Although there are many OAE organizations, the Outward Bound is considered the standard for OAE because "in 1962, Outward Bound was introduced to North America, signaling the beginning of the modern adventure education movement in the United States" (Attarian, 2001, p. 141), and still

effectively operates today. The success of Outward Bound led to an increased interest in experiential education and "the number of adventure programs showed steady growth from the 1970s through the 1980s and into the 1990s" (Attarian, 2001, p. 142).

The Outward Bound program has grown and changed since its original introduction in the 1960s. The original model let the "mountains speak for themselves" (Bacon, 1987, p.2). It was believed that experiencing the challenges in nature with a peer group had such a powerful impact that it was helpful to all with little discussion or processing needed. Instructors provided the space and time but were not counselors, discussion leaders, or group process facilitators. The mountains were the teachers (Bacon, 1987). Many participants reported to have good experiences and there was anecdotal evidence of the power of the program, but positive effects failed to stand up to research tests. This led to changes within the program and in the 1980s, the "second generation" model was created. This emphasized the instructor as a discussion leader. This model continued with the standard Outward Bound practices for an activity and then the participants processed and reflected afterwards (Bacon, 1987). For example, the group would be challenged to work together to cross a river. Afterwards, they would discuss what leadership aspects emerged, what worked, what didn't work, and so forth. This seemed to dispel some of the criticism of before, but took away from the uniqueness of Outward Bound in that it was an experiential learning program. The second generation model left it open to new criticism that it was a "conventional therapeutic or psychoeducational approach, albeit one which operates in a wilderness environment" (Bacon, 1987, p. 7). The learning was happening mainly in the discussion and verbal reflection aspect of the process, rather than the experiential. This led to the creation of the third

version of model known as the "metaphoric curriculum model" (Bacon, 1987, p. 7). In this scenario the instructor offers the same safety and educational information before activities attempted, and also adds structured instructions to "frame the course events so that the Outward Bound experiences become psychologically identical to real life challenges" (Bacon, 1987, p. 9). This may be in the form of reading, a poem, myth, fairy tale, or story that will have the participants thinking about a particular challenge or struggle in their own life. Then they will attempt the challenge. This way they will be learning while doing. The uniqueness of the Outward Bound experiential is preserved and the learning imparted by the participants if of greater value. In the metaphoric model "the primary focus in on setting up the experience so that learning and behavioral change are accomplished in the midst of the course experience. Given that the instruction had made the course activity psychologically equivalent to salient real life challenges, it is assumed that a success in the course activity automatically transfers and generalizes" (Bacon, 1987, p. 17). This third model of Outward Bound is what is widely used today, especially with special population groups. This model has had several positive research outcomes.

Research has shown that "outdoor adventure programs influence participants' awareness of themselves and others and have positive effects on the group" (Goldenberg, McAvoy, & Klenosky, 2005, p. 125). The study also found that Outward Bound specifically had a positive effect "on participants' self-esteem, self-confidence, personal and interpersonal development" (Goldenberg et. al, 2005, p. 125). The results revealed that the experience had both an immediate and long lasting impact on the life of the participant.

This program is particularly appealing to adolescents. It is a "creative adjunct to

standard behavioral treatment" (Jelalian, Mehlenbeck, Lloyd-Richardson, Birmaher, & Wing, 2006, p. 32). Many adolescents may not be willing to go to traditional therapy and even if they do they may not fully engage. "This kind of experiential education strives to achieve in a very concrete, action -oriented, immediate way what traditional clinical counseling attempts (and with teens often fails) to achieve in an abstract, verbal, measured fashion" (Marx, 1988, p.518).

The Outward Bound program would be effective for teens with IDDM since the program uses, "peer-enhanced adventure based therapy, because it targets increasing self-confidence and increasing mutual support with in the group" (Jelalian et al. 2005, p. 32). Outward bound has recently added new programs for cancer survivors, deaf and hard of hearing people, those who have suffered from a mild traumatic brain injury, and those living with multiple sclerosis. Outward Bound has found that these "course experiences act as mirrors of an individual's life, metaphorically providing a testing ground for how they respond to the stresses and choices they face daily" (Outward Bound Health and Social Services, 2006, para. 3). They have not yet created a program for teens with diabetes.

This would be a great opportunity for teens with IDDM, but there are some considerations that need to be made. For instance one study, "revealed non-significant improvements by the OAE group across several psychological constructs" (Sheard & Golby, 2006, p. 187). There were improvements, but not of a significant level degree compared to that of the control group. Also, the "quantitative studies that conduct one-year posttests find program impacts difficult to isolate due to external events or find a regression toward pretest scores" (Garst, Scheider, & Baker, 2001, p. 41). It seems as if

"the follow-up component...is critically important to service continuity, consistency, and integration" (Marx, 1988, p. 519). Many of the "teens spend extended periods in recreation settings far from home and then are returned to home situation with little support for developmental progress" (Marx, 1988, p. 519). They may have made huge leaps and bounds on the trip and return home full of confidence and ready to tackle life's challenges. This feeling could easily go away over time without follow up and reinforcement. It is important to have a continuation program in place when working with a special population. When it is through a diabetes clinic, the OAE course could be the catalyst to a long term support group. It is also important to remember that every person may not benefit on each trip and leaders will need to manage that.

Overall, if the metaphoric model is used and a follow-up option is given, the Outward Bound program could be a very successful asset to teens living with insulindependent diabetes.

# **Group Process: Getting it Started**

Roselle Kurland identifies six elements of developing a group. The elements include the needs of the group, the purpose, composition, structure, content, and the pregroup contact (Kurland, 1998). It is also important to recognize the context of the agency. This structure of developing a support group will be used for the purposes of this project.

#### 1.) Needs Assessment:

#### A. Typically Developing Teens

When creating a curriculum for a support group for a special needs population, it is important to discern the normative changes and stressors for the particular age group. This information will be used to help create a foundation for the curriculum because research "suggests that both healthy and diabetic adolescents share the same developmental goals" (Seiffge-Krenke, 1998, p. 1081). Only after the typical developmental issues are understood can the unique needs of living with insulindependent diabetes mellitus be considered. This section will focus on the typical developmental characteristics of the adolescent population. An overview of the biological, cognitive, and social aspects will be examined.

# **Biological Development:**

The start of adolescence begins at differing times depending on a person's gender, weight, ethnicity, and level of emotional stress (Berger, 2000). Females usually begin puberty a year or so earlier then males and it typically doesn't start until a person is at least 100 pounds (Berger, 2000). In addition, it has been found that teens from an African-American background begin puberty before Caucasian children, who do so before many Asian-American children (Berger, 2000). Adolescence is marked by a series

of drastic changes both physically and emotionally. Many of these changes start in the brain. There is development in the frontal lobe which is responsible for memory, decision making, speech, and voluntary movement. There is a notable increase in the white matter which increases neural communication. Also there is a period of synaptogenesis and pruning similar to that in infancy (Cole, Cole, & Lightfoot, 2005). This is when the brain develops new neural synapses and then strengthens the ones that are used and abandons of the ones that are not being used. This allows for maximized usage of brain space and energy. Besides physical changes in the brain, there are also hormonal changes. The hypothalamus sends a hormonal signal that stimulates the pituitary gland that in turn stimulates the adrenal and gonad glands (Berger, 2000). This hormonal stimulation begins puberty. The four main hormones that cause the physical changes are the gonad releasing hormone (GnRH), testosterone, estrogen, and the growth hormone (Berger, 2000). These hormones are responsible for the many physical changes that occur in adolescence.

The growth hormone incites development in all areas of the body. Weight and height increase and the internal organs grow. It is important to remember, "visible spurts of weight and height precede less visible spurts of muscles and organs," (Berger, 2000, p.447).

The GnRH, testosterone, and estrogen increases are accountable for the primary and secondary sex developments. Primary sex development refers to the development of reproductive organs (Berger, 2000). During this development a female will experience menarche, her first period, while a male will experience spermarche, his first ejaculation. The secondary sex characteristics are some of the most visible and anxiety causing

changes for adolescents. In males and females there is some breast development, facial and body hair growth, and a lowering of the voice due to growing vocal chords (Berger, 2000). The degree to which each of these changes occurs varies by sex and individual development.

Nutrition also influences physical development. Most children in developed countries have enough to eat so that development is not significantly delayed, but food fads and unique diets of adolescence can affect their health (Berger, 2000). Many teens consume too much salt, sugar, fat, and preservatives and only 27% of high school seniors consume the recommended amounts of fruits and vegetables (Berger 2000). It is also typical for many teens to overeat and under exercise during this period of their life. With that said, adolescence is also a time when many eating disorders such as anoxia nervosa, bulimia, and binge-eating emerge.

These physical changes often make teens very aware of their body. They become sensitive to their appearance as "precipitated by the physiological changes of puberty" (Berger 2000, p. 452). Few teenagers are completely satisfied with their body and this "negative self-appraisal can have a major impact on self-esteem" (Berger 2000, p. 452). As discussed later, positive feedback from family members can help to counteract this negative effect.

Not only are teens growing and developing physically, they are also developing new ways of thinking about the world.

# **Cognitive Development:**

According to Jean Piaget, adolescents are in the formal operational stage of development (Wadsworth, 1989). This means that they are beginning to be able to think

about problems in a logical and systematic way. Abstract and hypothetical thought are now available to them. With these new skills, teens are able to think about life in new ways. They begin to use deductive reasoning to find solutions to problems. They are also able to think about their own thought processes and think about other people's points of view. These ways of thinking are referred to metacognition and theory of mind respectfully (Wadsworth 1989).

With the ability to think about their own thoughts, comes egocentrism.

Adolescents are often 'in their own heads' and believe that their thoughts, feelings, and experiences are unique to them (Berger, 2000). This is a reason that they downplay the advice from adults and act on their own personal emotions and feelings as fact. Also, due to the egocentric thinking, many adolescents believe that they are immune to the common dangers of others, destined for greatness, and are on the minds of others (Berger, 2000). Theorists categorize these thoughts as fables. The invincibility fable states that adolescents believe that nothing can hurt them while the personal fable states that adolescents believe that because they are unique they are going to be famous in one way or another. Many adolescents also have an imaginary audience, believing that others are deeply interested in their appearance and behavior (Berger, 2000). These cognitive factors often make it difficult for teens to make good judgments. Believing that they are invincible may influence their judgments about safe sex and drug use. Adolescents are also impacted by their family and friends as discussed in the next section.

#### Social Development:

Erikson recognizes the period of adolescence as a time of identity vs. role confusion (Erikson, 1963). Essentially this is a time in a young person's life when they

are trying to find themselves. They are struggling to create their own sense of self and redefining the relationships with those they have around them. James Marcia found that there were four main categories of identity that adolescents fit into (Cole, Cole, & Lightfoot, 2005). Identity achievement is when a person has gone through an identity crisis, struggling to find their own place in the world, and has defined their own views and thoughts. Some may foreclose on their identity and not go through a crisis and take on the opinions of their parents. Others may try on several identities and not settle on one that fits them but rather diffuse themselves though a variety of roles. Finally, some people may currently be in an identity crisis, otherwise known as a state of moratorium (Cole, Cole, & Lightfoot, 2005).

This need to find themselves affects adolescents' relations with others, particularly their parents. Teens are in a state of limbo, wanting to be independent and also still needing their family support. They may not even realize how much they are still influenced by their parents in that "virtually every aspect of adolescent behavior is directly affected by the family" (Berger 2000, p. 511). Because teens want to make their own decisions and now have the cognitive ability to think about doing that, they often test the rules and boundaries of their parents. Adolescents often see rules by their parents as a attempt to control and dominate while parents see the rules as a way to love and protect their child (Berger 2000). The different point of view about the necessity of rules is what often causes fighting between parent and child. Most often, "bickering occurs about the habits of daily life" (Berger, 2000, p. 512). An adolescent who decides to eat ice cream for breakfast or dye her hair purple is trying to make a statement of independence from her parent's ways of life. Although limit setting is imperative for adolescents, the arguing

can "lower the quality and harmony of family life" (Berger, 2000, p. 512). Family functioning is an important part of an adolescent's development. Family functioning consists of five components as follows: parent-child relationship, communication, support, connectiveness, and control (Berger, 2000). Each of these aspects can affect the developing teen in either a positive or negative way.

Although the family has been found to have the most social influence over an adolescent's development, the peer group is also very important (Berger, 2000). Teens are developing different relationships with their peers and also with sexual partners.

Many teens in the process of becoming sexually mature begin to experiment with sexual partners. And while they are branching out and coupling in romantic ways, they are also very dependent on their peer group for support. Their peer group is who they often discuss their relationship issues with and who they use as a buffer between complete independence and reliance on their parents (Berger, 2000). Adolescent peer pressure can be a constructive or destructive force. A teen may witness a majority of her friends trying out for sports teams and decide to become more active herself. On the other hand she may see a large number of her peers try out drugs and alcohol and decide to join in. It has been found that nearly one-half of eighth graders and 8/10 seniors have tried alcohol (Berger, 2000). Again, family support and self-esteem affect the degree of which social pressure influences an adolescent.

#### B.) Adolescents with Insulin-Dependent Diabetes Mellitus

Having a chronic illness, such as diabetes, "is associated with an increased risk of psychological and behavioral problems." (Goh, 1999, p.1) This is because in addition to the "normative stressors associated with adolescence, adolescents with diabetes

experience additional, non-normative stressors such as serious dietary and activity restrictions, new challenges to separation from parents, and body image issues" (Obeidallah & Hauser, 1999, p. 103). The normative stressors of adolescence, such as drastic body changes and the search for self-identity, have been discussed in the previous section. This section will examine the unique challenges for adolescents living with Insulin-Dependent Diabetes Mellitus (IDDM). First, the biological issues pertaining to IDDM will be identified followed by the cognitive and social hurdles.

#### Biological:

It has been found that physical well being, in terms of perceived quality of life, "is associated with functional health status, perceived health, physical symptoms, and the ability to meet basic needs" (Faulkner, 2003, p. 363). In teens with IDDM, there is a difference in their functional health status as compared to that of healthy teens. They have been found to have a chronic and incurable condition.

IDDM, often referred to as Type-1 Diabetes or juvenile diabetes, is a disease that affects nearly one in every 400 to 600 children in the United States (National Institute of Diabetes, 2003). This type of diabetes is not preventable and is not caused by eating too much sugar or being overweight. It accounts for about 5-10% of all diabetes cases (National Institute of Diabetes, 2003). This type of diabetes is usually diagnosed in children and young adults but is not limited to these ages. Diabetes is when your body can not use the energy it needs from glucose due to the lack of insulin production (CDA, 2005). When a person has Type-1 diabetes, the body's immune system attacks the beta cells in the pancreas that are responsible for making the insulin hormone (National Institute of Diabetes 2003). Insulin allows the body's cells to absorb the sugar, also

known as glucose, from the food a person eats. Without insulin, the body is unable to use the glucose and it begins to build up in the bloodstream causing high blood sugar levels. Since the body is not getting the energy it needs from the food, it starts to break down fat and muscle tissue to sustain itself.

The reason for this destruction of the pancreas is still unknown. According to William Winter, M.D., a professor at the University of Florida College of Medicine, "At most, only 15 percent of people with type 1 diabetes have an affected first-degree relative—a sibling, parent, or offspring. Research suggests that genes account for less than half the risk of developing Type 1 diabetes. These findings suggest that there are other factors besides genes that influence the development of diabetes" (JDRF FAQ's, 2005, para. 8). Scientists believe that there are certain HLA marker genes that put people at risk for Type-1 Diabetes and are still researching the possible environmental triggers (JDRF FAQ's, 2005).

A parent or the child may begin to notice symptoms that suggest diabetes. Some symptoms include; tiredness, thirst, frequent urination, hunger, moodiness, weight loss, blurred vision, and increased infections (CDA, 2005). When the teen or parent notices that something may be wrong and visits the doctor's office, the doctor will perform a number of tests to determine if the child is diabetic. Most of the tests involve urine or blood samples. The doctor may take a urine sample to look for glucose in the urine not being used by the body. Also, the presence of ketones, or fatty acids broken down by high blood sugar levels, in the urine is an indicator for diabetes (JDRF FAQ's, 2005). The doctor can also look at the sugar levels in the blood.

As of today there is no known cure. The destruction of the pancreas is progressive

and irreversible. To compensate for the lack of insulin production, the patient must take some form of insulin each day to try and stabilize blood sugar levels. This is important for daily survival and the well being of the patient.

Insulin in the only way to treat diabetes, whether it is injected, infused, or transplanted. Although the amount of insulin someone needs and how each type works is a little different in every person, there are a few basic categories. There is rapid acting insulin (Humalog®/Novalog®) which starts to work in just a few minutes and lasts for a couple hours (CDA, 2005). There is fast acting insulin (Humulin®/Novolin®) that takes thirty minutes to an hour to work and lasts five to eight hours. There is also intermediate insulin (Lente®) and extended long-lasting (Lantus®) types (CDA, 2005). Patients must work out with their doctors which combinations of insulin and at what times of day work best for their body. The insulin must be taken before meal times so that the body will be able to break down and use the sugar that is consumed. There are three main ways in which diabetics can choose to receive insulin. Each option has both positive and negative features.

Some people choose to inject insulin with the use of a syringe or an insulin pen. This patient will be responsible for injecting his or her own insulin several times a day. They may choose to inject in the arm, stomach, buttocks, or thigh depending on the speed of the insulin. One advantage of lancet injection, is that this is a more discrete method. It can be done in the bathroom of a restaurant or in the car. This young patient may have no outward signs of diabetes and many of their friends may never even know. There are also challenging aspects associated with injections. The diabetic will need to know the exact details of their carbohydrate intake, so that they can calculate how much of each type of

insulin they will need for the meal. They also may have a hard time keeping tight control on their blood sugar levels due to the fact that they don't constantly have insulin in their bodies. They may experience more highs and lows that can lead to further complications down the road. In addition, they have to stick themselves several times a day on the finger for checking blood and then again to administer insulin (CDA, 2005).

A second, increasingly popular method is the insulin pump. The insulin pump is a small device, about the size of a pager, that continuously delivers fast acting insulin throughout the day and night (Naomi Berrie Diabetes Center, 2005). When the person with diabetes eats, they can push a button that will deliver an extra dose, or bolus, of insulin to cover the meal. A small tube is inserted into the patient's abdomen and must be changed every two to three days. There are many advantages to the pump including; eliminating individual injections, improving flexibility and timing of meals, improving flexibility and timing of exercise, providing more accurate insulin dosages, and reducing hypoglycemia (ADA Insulin Pumps, 2005). Overall, it allows the patient to have more choices in what and when they eat and how much and often they exercise. It helps reduce the magnitude of blood sugar level swings associated with injections which can help reduce long term complications. The pump, however, is not perfect and does not free the person from daily management. The pump still requires effort and attention from the wearer. The pump can cause weight gain, be expensive, and get infected if not taken care of properly. It can also be bothersome being attached to the pump most of the time. It can be removed for swimming, showering, or rough sports and then blood sugar must still be checked and sometimes additional insulin used. Some children and teens may have a hard time with body image and feelings of normalcy. As previously mentioned, most teens

experience issues with body image and normalcy. This is no different for teens with diabetes. In fact, "body concepts of the diabetic adolescents were particularly negative" and they "perceived the changes in their bodies as being somewhat delayed" (Sieffge-Krenke, 1998, p. 1074). This is important to think about when a teenager is trying to decide which insulin method they prefer. The pump may provide some better glycemic control if used properly but may do more harm in terms of body image. Teenage girls may find it hard to hide in their clothing selection. According to the American Diabetes Association, however many "pump users agree the advantages outweigh the disadvantages" (ADA Insulin Pumps, 2005, para. 13). Often times, an older adolescent and young adult chooses to switch to the pump when such body image issues are not as prevalent.

A third, innovative and still developing approach, is islet transplantation. This is when insulin producing cells, called islet cells, are taken from a donor and transplanted into the diabetic's liver. The cells then start to produce insulin in the patient (Mayo Clinic, 2005). As of June 2003, about half of the patients who have received this treatment have remained insulin free for up to a year (National Diabetes Information Clearinghouse, 2003). The typical transplant requires nearly 1 million cells from two pancreases to produce enough insulin to be injection free. The overall goal of this surgery is to slow or even eliminate some of the associated complications of diabetes due to the changing high and low blood sugar levels. The surgery can reduce these complications but comes with a price. After the initial risks of bleeding, blood clots, and infection, the patient will have to deal with the side effects of anti-rejection drugs for the rest of his or her life. The National Institute of Health states that, "Rejection is the biggest problem

with any transplant. The immune system is programmed to destroy bacteria, viruses, and tissue it recognizes as 'foreign,' including transplanted islets" (National Diabetes Information Clearinghouse, 2003, para. 12). These drugs must be taken for life and side effects include, mouth sores, GI problems, diarrhea, high cholesterol, low white blood cell count, kidney problems, bacterial and viral infections, and a higher risk of tumors and cancer (National Diabetes Information Clearinghouse 2003). Scientists are looking for a way to provide islet transplants without the use of immunosuppressive drugs. Choosing an insulin method that works best is very important for the patient. They need to be comfortable with their choice and capable of what it entails so that they can keep tight control of their blood sugars. This is crucial because it can help reduce some of the very serious complications of diabetes.

In addition to insulin therapy, diet and exercise are used for the prevention of serious long- term consequences of the disease. A diet that is low in concentrated sugar can help the teen reduce their overall blood sugar level. Also, a healthy exercise plan can help to burn off excess sugar. This is often difficult for the teen because, as discussed in the previous section, they see their friends trying food fads and eating whatever they want. It is very hard for teen's to stick to a nutrition plan when their friends are having pizza for breakfast and candy bars for lunch. Even with good insulin administration, diet and exercise, there are many serious short and long-term complications associated with diabetes. "Overall, the risk for death among people with diabetes is about twice that of people without diabetes of similar age" (National Institute of Diabetes 2003, para. 13). To reduce this risk on a daily basis, the patient must take insulin and also get enough glucose to prevent either very high (hyperglycemia) or very low (hypoglycemia) blood

sugar which can both have series effects, including death. Too high blood sugar levels can lead to ketoacidosis (DKA), which is the breakdown of fat and protein. This happens when the person is not getting the glucose they need from the food they eat and the body starts to breakdown fat and protein to try and sustain energy. The fat and protein in the blood will essentially poison the body. Too low blood sugar can lead to diabetic coma and death if not treated immediately with glucose.

A diabetic person can face a multitude of long term complications from the body's exposure to high levels of sugar and fat in the blood. Overall, it's the damage of the nerves and the blood vessels that leads to the various complications. Damage to the nerves is called Diabetic Neuropathy. It is caused by "metabolic factors, such as high blood glucose, long duration of diabetes, possibly low levels of insulin, and abnormal blood fat levels" (National Institute of Diabetes, 2003, para. 4). Many different types of nerves can be damaged that control many different areas of the body (ADA Type 1 Diabetes Complications, 2005). Damage can affect the eyes, leading to blindness. The nervous system may be affected, leading to impaired sensation or pain in the extremities. The extremity damage is the leading cause of non-traumatic lower limb amputations. The nerve damage can affect the gums leading to loss of attachment with the teeth. It can also severely damage the digestive system leading to gastroparesis. This is when the stomach takes too long to empty its contents to the intestine (ADA Gastroparesis and Diabetes, 2005). The kidneys are also affected and can fail due to the neuropathy. Another concern for many men and women, is the way in which their sexual health is affected by the damaged nerves. Men can suffer from erectile dysfunction and women can experience vaginal dryness and pain during intercourse (ADA Men and Women's Sexual Health,

2005). The lipids in the blood can raise the patient's blood pressure and increase the risk for cardiovascular problems such as heart attack and stroke (National Institute for Health, 2005). These are a few of the many ways in which diabetes can damage the body and cause extensive complications. Many people believe that diabetes is mainly just about not eating sugar when it is, however, a very complex disease that requires constant attention and can cause many complications that can reduce a person's quality of life and reduce the person's life span significantly.

#### Cognitive:

In the previous section on typical adolescent development, the invincibility fable was discussed. Many teens think they are indestructible and many adolescent diabetics also believe this to be true. They can not visibly see or feel some of the damage they are doing to their body at the time if they are non-compliant with their insulin and diet regime. Many type-1 diabetics do not see long-term complications for many years to come. Even if they are educated about the long-term effects of diabetes by their parents and doctors, it is typical for adolescents to downplay adult advice and act on their own emotions. If they feel healthy, then it may be hard to convince them that, in reality, they are not taking good care of themselves.

Another adolescent cognitive phenomenon that is compounded in the presence of diabetes is the imaginary audience. A *typical* teenager will often feel that they are constantly being watched and judged by others. Imagine the consequences for a teenager who is different. The teen already feels as if people are interested in their appearance and behavior. The teen may worry that someone might think they are doing drugs if they are seen giving themselves an injection. They may truly believe that everyone in the cafeteria

at school is staring at them when they check their blood sugar, however discreetly.

#### Social:

Two of the biggest social challenges for adolescents are trying to distinguish their sense of self and trying to renegotiate their roles with others. Their "social or interpersonal well-being is dependent upon attaining an acceptable level of interaction with friends, support from family members, and role fulfillment" (Faulkner 2003, p. 363). These challenges are further complicated when a teenager is living with a chronic illness. They often have difficulty in developing a separate identity, making close friends, and having romantic relationships (Seiffge-Krenke, 1998).

As formerly mentioned, it is very important for adolescents to become aware of their identity and who they are as a person. This is often a direct association to their relationship with their parents. Adolescents are essentially expected to separate from their parents and develop their own point of view. When an adolescent has IDDM, it becomes harder to them to do this as the relationship becomes more complicated. "Parents of adolescents with a chronic illness exhibit different forms of parenting and expectations. Constant parental monitoring and overprotection may hinder the normative transition of separating from the family and becoming more oriented toward peers" (Seiffge-Krenke, 1998, p. 1073).

Parents have many additional worries and concerns about their diabetic child. If the teen is traveling anywhere, going to school, or going to a sleepover, they can not leave home without all the supplies they may need which include, at the *very least*; blood glucose monitor, alcohol swabs, test strips, glucose or candy, insulin, a way to keep the insulin cool, syringes, sharps disposal, emergency glucagon pen, and their insurance card

and medical information. They must make sure that they will have sufficient food available and know that they can eat it at certain times. This required behavior and planning is exactly opposite from many teens' nature. "Teens want to be spontaneous-to be able to do new things, eat things, and try things," (JDRF Helping 2005, para. 15) on a whim whenever they feel like it. They want to be able to just get up and drive to the mall, go on a date, or decide to stay late at a friend's house to spend the night. As with typically developing adolescents, these daily habits make up a majority of parent-child arguments. Since there is a "strong impact of the disease on adolescents day to day life" (Seiffge-Krenke 1998, p. 1074), the day to day aspects of the illness affect the parentchild relationship. The parents try to keep their child safe and make sure that all their child's courses of therapy are being strictly followed. The teenagers often don't see the long term effects and let their dietary and insulin restrictions slide. Also sometimes teens don't check their blood as often as they should because is check is a reminder of their disease or they are afraid of what the results may be and that their parents may get mad. The parents then begin to reiterate what the child needs to eat, how they need to exercise, and how they need to administer their insulin again and again. This natural overprotection and reminding by the parents interferes with the adolescent's steps towards independence. It is not surprising that the "strong need of diabetic adolescents to achieve age-typical autonomy and independence may help to explain the lack of compliance found in many studies" (Seiffge-Krenke 1998, p. 1079). The teen may be experiencing difficulty in "balancing the need for independence with the dependence on care givers" (Strawhacker, 2001, para. 9). To help achieve this balance with the other people in their lives, they need to set boundaries for themselves and for their relationships with their

parents.

Boundaries with friends may also be hard for a teen with diabetes. It has been found that "chronic illness discourages adolescents from developing close peer relationships" (Seiffge-Krenke, 1998, p. 1073). This is a time in their lives where they want to be part of a group and conformity is key and yet it is also important that their friends understand them and know what to do if something happens. The dilemma is "how can they act just like their friends and still keep control of their diabetes" (JDRF Helping, 2005, para. 9). There are issues of drinking, smoking, sex, staying up late, eating junk food, and participating in other high-risk behaviors. It if foolish to think that the diabetic is not going to try these behaviors along with their friends. The Juvenile Diabetes Research Foundation states that "the reality is the many teens and college students drink anyway" and they need to learn to do it "as safely as possible" (JDRF Scoop on Drinking, 2005, para. 1). This is not hard to believe considering more than eight out of ten of high school seniors partake in drinking alcohol.

All of these biological, cognitive, and social needs are important to consider in designing a group geared towards adolescents with IDDM.

### 2.) Purpose:

An insulin-dependent diabetes specific program would offer many services to teens and families in addition to the benefits of the standard Outward Bound Experience. The purpose of this group will be based in the needs assessment. In summary, teens with diabetes are often struggling with self-esteem issues, relationship boundaries with their parents, and the lack of solid peer friendships. The teens would have a feeling of acceptance and similarity among their peers. They would not feel like the different one.

They would be in a safe atmosphere to freely discuss diabetes and many other issues related to adolescence. The teens will be away from their parents for nearly a month. This will help them to take new responsibility for managing their own care. This will also be a chance for parents to have some respite and also a time for them to gain confidence in their child. It will give both parties a chance to step back and reflect upon their relationship.

# The purpose of this group is to:

- 1. Develop self-esteem in participants
- 2. Promote healthy relationships
- 3. Develop problem solving skills
- 4. Provide an atmosphere conducive to peer cohesiveness

#### 3.) Composition:

# a.)Participants:

This group will consist of ten members. They will be between the ages of 15-18 and coeducational. A difference in cultural background and ethnicity may bring new ideas of working within a family as a teen with chronic illness and should be embraced for this group.

#### b.)Staff:

# Child Life Specialist:

"A child life specialist is a professional who is specifically trained to help children and their families understand and manage challenging life events" (Child Life Council, 2003, para. 1), and possesses the skills to help children process these events. Also, "child life specialists are skilled in providing developmental, educational, and therapeutic

interventions for children and their families under stress. Child life specialists support growth and development while recognizing family strengths and individuality, and respecting different methods on coping" (Child Life Council, 2003, para. 1). Child life specialists have training in psychology, education, play, medical aspects and child development. In fact, "on many teams the child life specialist is the 'content expert' on child development" (Hicks, 2005, p. 1). Child life specialists have been working in camps for children coping with illness for some time. They have used their skills to, "develop therapeutic play, aid in training of volunteer staff, and address the issues that may present themselves during the camp session such as homesickness, grief, supporting growth related to coping with their illness, and self-care routines" (Hicks, 2005, p. 2). This is a chance for them to take that experience one step further. "They should also collaborate with the skilled recreation leaders, letting them assume responsibility for the risk activities as a complement to the counselor's expertise in processing the experience and helping participants relate it back to everyday life" (Nicholson, 1986, p. 529). The specialist should additionally have experience with adolescents with IDDM. The child life specialist should be CPR and first aid certified.

#### Nurse Practitioner:

A nurse practitioner with extensive experience working with adolescents with IDDM must be part of the team. This leader will be in charge of medication, answering medical questions, and responsible for any medical situation that may arise. The nurse practitioner should be a certified diabetes educator, CRP trained, and first aid certified.

# Wilderness Expert:

The wilderness expert will be responsible for the training and supervision of wilderness

based activities. He/She should have extensive and thorough outdoor experience and be certified in CPR, first aid, water safety, and Wilderness Education. He should also have experience working with adolescents.

# Junior Counselor:

It is preferred that there is a counselor on the trip who has had some experience in the wilderness and who is also living with IDDM. This person should be at least 21 years old. This person should have excellent control of her blood sugars. Her main role will be to model healthy diabetes management in a gentle way. She will periodically check her blood sugar lever throughout the day, watch her diet, and administer herself measured insulin. She will act as a role model for the participants without telling them what to do.

# 4.) Structure:

The course will be structured around a standard 22-day Outward Bound Course.

#### 5.) Content:

Much of the learning will be done through modeling and observation. Since there will be an experienced counselor who also has diabetes, many of the participants will observe him. The counselor will be required to have good blood glucose control and to model healthy habits in nutrition, blood- sugar monitoring, and insulin administration. The participants will also learn from each other. If nearly everyone is testing their blood sugar before lunch time, those who may have not, probably will too. Because of the increased activity level and change of environment, there will be extra opportunities to monitor natural changes in blood sugar levels. Meal times will be a part of each day. There will be breakfast upon waking, a mid-morning snack break, lunch, afternoon snack, and dinner. The participants will be responsible for their own and others food choices. They will take turns planning meals for the day. This will help to foster independence about meal

planning. The group for the day will need to buy food for meals and snack and to prepare them.

It is important to remember the draw is the wilderness experiential. The participants came to have the adventure aspect and hopefully experience something deeper and more meaningful in their lives. The uniqueness of this trip should be an emphasis on learning while doing the experiential followed by support in the discussion afterwards. The content is created using a metaphorical-model of outdoor education curriculum. The sessions will begin with a problem-solving or thought provoking exercise to phrase the activity to be relatable to life and life with diabetes. It is followed by the experiential activity and then a debriefing discussion(Bacon, 1987). Many of the experientials will also be planned by the participants. This choice will help increase their independence and self-esteem.

If the group is facilitated in a respectful and trusting atmosphere, camaraderie and friendship should develop among the participants. This will increase the teens feeling of social support.

The calculated risk seen in many of the experiences will help to increase confidence in the participants. They will attempt and conquer challenges they may have previously deemed impossible.

All of these aspects on the content are shown in detail in the Manual for Professionals section (appendix 1a). This section describes specific therapeutic interventions to supplement the Outward Bound experience to help achieve the goals for adolescents with diabetes.

# 6.) Pre-group Contact:

The teenagers should be recruited through a diabetes clinic. There could be a sign up sheet in the lobby, letters sent home, and personal inquiries made. After the group membership is decided, letters will be sent home to all of the teens and their parents. There should be an informational meeting for all interested parties. This meeting will help to inform potential participants and their families about aspects of the trip. It will be a chance to reassure and encourage parents and answer any questions they may have. There should be a picture slideshow, time for discussion, and materials to take home. These materials can be developed in collaboration with the wilderness organization. For those who decide to attend, there will be an information sheet for the participants to complete. It should include contact information, interests, pertinent medical information, and a few questions including "What do you hope to get out of the group?" Finally, a letter should be sent to the endocrinologist requesting information on disease control and compliance of each participant to help to workers get a better sense of where the teens are in their coping.

# 7.) Agency Context:

A diabetic clinic administration should be in support this type of peer group. Teenage diabetics are known to have a high non-compliance rate due to the effort of upkeep and the desire to be *normal*. If a group is formed working on managing the hassles, building self-esteem, and developing boundaries with parents, the attending diabetic should increase compliance and disease control. This would benefit the goals of the institution. Funding and safety will be two concerns. Funding can be attained through the use of grant writing and fundraising. This should be a collaborative effort done by the child life specialist and nurse practitioner. Safety should be a number one priority in the eyes of the

leaders. The developing staff member should make sure that all staff and organizations involved are reliable and hold safety in the utmost.

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## Outdoor Adventure Based Support Group for Adolescents Living with Insulin-Dependent Diabetes Mellitus (IDDM)



**A Manual for Professionals** 

### Dear Facilitator:

Welcome to your first day as a counselor of an outdoor adventure support group for teenagers with IDDM. This manual will offer activity ideas that coincide with the standard 22-day Outward Bound course. These activities will supplement the standard course to provide the maximum effectiveness for the specific population.

This should be used to enhance the wilderness curriculum. The physical challenges of the outdoor activities will allow the participants to go beyond their preconceived physical limitations. The metaphors and shaping interventions described in this manual will help to give those activities meaning that is transferable to life.

## Day 1: Arrival and Check In

Arrival: Welcome participants, parents, brothers, sisters, and friends. Let everyone know how excited you are for them to be here and that you are looking forward to a great few weeks together. Ask participants to check in with the nurse practitioner who will sign them in and make sure that each participant has all the medication, needles, tests strips, and all other diabetes supplies that they need. While participants are doing this, the child life specialist and wilderness expert can talk to the parents and answer any last minutes questions about safety and other trip details. After everyone is checked in and ready, the participants, counselors, and parents can pack the vans that will take the participants and counselors to the beginning campsite. After the vans are packed, allow some time for goodbyes between teens and family/friends.

Warm-Up Activity: The van ride to the initial campsite is a good place to start the introductions. In 15 passenger vans, it is possible to arrange the seats so that they are in a circle formation. A fun ice-breaking activity is called two truths and a lie<sup>1</sup>. The participant will introduce himself and say his name. He will then say three facts about himself. Two facts will be true and one will be something made up. It is up to the rest of the group to decide which two are true and which one is a lie. This is a fun way for a participant to let the rest of the group know some interesting facts about each person

Outdoor Experiential: By the time the group reaches the campsite it will be getting close to dusk. The entire group can gather firewood and the wilderness expert can instruct everyone how to make a fire. The group can then set up camp. It would be a good idea for the counselors to have the meal planned for the first night. The rest of the meals will be planned by the participants as described more later. The group will eat and then the facilitator could have the participants sit around the campfire in a circle and go around and tell the story of their name (www.wilderdom.com/games/descriptions/name story.html). This is a meaningful way for participants to learn each other's names. After the icebreaker the facilitator can explain the purpose of the group and explain some ground rules. The purpose is to experience the outdoors in a challenging and rewarding way. It is important to remember that many of the participants are attending because of this aspect. The draw of the outdoor experiential should not be forgotten. The group should be told that they will be doing these activities and challenges based around the five core values of Outward Bound. Outward Bound Wilderness has held true to five core values. These values are 1.) Adventure and challenge to build leadership, 2.)Learning by doing to help increase confidence.

<sup>1</sup> Adapted from (www.wilderdom.com/games/descriptions/twotruthsandalie.html)

3.)Compassion and service to develop teamwork, 4.)Social and environmental responsibility to instill stewardship, and 5.)Character development to help the participants achieve personal growth (Outward Bound History, 2006).

After this the commonality of diabetes should be discussed. The fact that each participant has diabetes should not be the "elephant in the room" that is overlooked but very much a part of the trip. The facilitator should include something to the effect that growing up with diabetes is hard and these teenagers face many challenges that many of their peers don't. This trip is going to challenge them mentally and physically and she hopes they will see how capable they are. They will also create incredible friendships during their time in the wilderness and will need to build relationships with the others to support each other in the tasks they will attempt as a group. They have already showed strength by coming on this trip. It can be hard to leave home and leave parents for this long. The facilitator should then open it up to the group to express their expectations and set some ground rules. There are some ground rules that the facilitator should add if they don't come up naturally in the group. One should be no 'coupling' or pairing up exclusively with one other person. This could be in the form of a romantic relationship or best friendship. Most likely, the group will say they want to discourage the formation of 'cliques'. It is good to remind them that the whole group will need to work closely together in many situations and this could become complicated if people feel left out. Another ground rule should be the prohibition of any illegal drugs and substances. This should be non-negotiable and any consequences should be clearly stated. After the ground rules are set, the facilitator should have the participants sign up for the meal schedule. This will let them know when they will be responsible for arranging the meals and snacks of the day. Participants should work in pairs or groups of three for meal planning. Finally, the facilitator should suggest that the participants name their group. The name will give them ownership and a sense of identity for the group and its goals.

After this discussion, there should be a short break for members to check blood, get a snack, or stretch their legs for a few minutes. When the group reconvenes, the counselors can pass out the journals. The journals will be provided for the personal use of each participant. There will be built-in time to journal throughout the 22 days. Also, throughout the journal will be a quote from each person's song that they sent in prior to the trip. This quote can help to serve as a catalyst if one is stuck when writing and can help the participants to see lyrics that are meaningful to their peers.

The group can then relax around the campfire and talk, sing campfire songs, and journal until it is time for bed.

## Day 2:

After camping out the first night, the campers will be woken up to see their first sunrise of the trip. The sunrise is a visual and beautiful reminder that it is a new day. While they are watching the sunrise, the facilitator can play a song that one of the campers listed as meaningful to them in their application. This sunrise surprise will then have particular meaning for that person. If they want to they can share why they chose this song. This is a nice and thought provoking way to get each day started.

After morning blood sugar checks, insulin administration, and breakfast, the activities of the day can start. This day should be a mix of team building activities and initial outdoor education aspects that need to be taken care of such as CPR and first aid.

### Warm Up Activity 1: Are you a Hammer or a Nail?<sup>2</sup>

This activity gets participants up and moving. It will help to wake everyone up. It also lets members know a little bit more about each other.

#### Hammer or Nail?

Concept: metaphorical, abstract, right brain, control over one's life

What to do: Explain that this activity is meant as an exercise in abstract thinking. "Use your imagination. Think of yourself in non-concrete terms." Ask students which of the two choices best describes them. Give them time to think, then ask move to the indicated side of the ground to show their choice. "Who is a hammer?... Who is a nail?" Then have them ask others near them why they feel like a hammer or a nail and give them about a minute to discuss their choice.

In one session probably no more than six to ten of these should be done. If the class is very small, students might be asked to walk to one area of the room (nails over here; hammers over there) and talk about why they feel the way they do.

- Hammer or nail
- Jeans or a suit
- Egg white or egg yolk
- Sun or moon
- Rock group or string quartet
- Mountain or valley
- Physical or mental
- Question or answer
- Leaf or wind

### Warm Up Activity 2: Have you Ever? 3

This activity uses the getting to know you and introduces physical contact into the group. This is another energizing activity to get participants moving around and letting them get to know one another.

- This an active, fun way to explore and celebrate the rich diversity of experiences that different people bring to any group. Works best with larger groups.
- The instructor explains that he/she will call out different things that may or may not apply

Adapted from The Hammer or Nail Exercise (http://www.rider.edu/~suler/hammer.html) Suggested by John Provo of Reitaku University

<sup>&</sup>lt;sup>3</sup> Adapted from Have You Ever? (http://www.wilderdom.com/games/descriptions/HaveYouEver.html)

to each person. If the item does apply to you, then run into the middle, jump in the air, and do a high 5 with anyone else who runs in.

- A list of about 20 items should be tailored to the particular group, setting, and program
  goals, but some suggestions are below. Usually the items are of a "Have You Ever....?"
  form, but also free to ad lib, e.g., "Does Anyone Have....?"
- Items should be carefully considered in order to prevent embarrassment, ridicule, etc.
- The motivation of participants to participate often needs some amping up. Try to do some other warm-ups first. The rest is down to the leader's skill in demonstrating and encouraging.
- List of Possible "Have Your Ever?" Items:

Have you ever climbed to the highest point in your country of birth?

Have you ever lived overseas for more than 1 year?

Have you ever been without a shower for more than 4 days?

Do you have both a brother and a sister?

Can you speak 3 or more languages?

Have you ever informed someone the facts about type-1?

Have you swum in 3 or more different oceans?

Have you broken 3 or more bones in your body?

Have you ever free-climbed a tree or rockface more than 10 meters vertically?

Can you touch your tongue to your nose?

Have you ever cooked a meal by yourself for more than 20 people?

Have you ever been parachuting or done a bungee jump?

Have you given yourself your own insulin?

### Warm Up Activity 3: The Human Knot<sup>4</sup>

This activity builds of the ideas of physical interaction and problem solving to the group. Both of these will become increasing important over the course.

Equipment: None.
Time: ~15-20 minutes

**Brief Description**: Standing in a circle, group members reach across and shake hands - use hand connecting to a different person.

The group then tries to unravel the "human knot" by unthreading their bodies without letting go of each other people's hands.

#### Set up & instructions

- Be aware that the activity involves close physical proximity and touch potentially in sensitive places! It can be used as a first activity in an adventurous program with volunteers (e.g., the start of an Outward Bound program). However, if the program is less adventurous, or group members potentially will have significant problems with such proximity, e.g., due to culture, or social or psychological problems, then Human Knot could be introduced later in a program.
- Ask participants to form a circle, shoulder-to-shoulder. Encouraging/urging participants to all stand closer can be a subtle way of helping to prepare them for what is about to come.
- Ask participants to each place a hand in the middle of the circle and to grasp another hand.
- To emphasize learning of names and get a bit of fun going, ask participants to introduce themselves to the person they are holding hands with.
- Then ask participants to put their other hand in the middle, grasp a different person's hand, and introduce themselves.
- Don't let participants let go of hands some will be tempted to think the activity might then be over but it is only just starting.

<sup>&</sup>lt;sup>4</sup> Adapted from Human Knot(http://www.wilderdom.com/games/descriptions/HumanKnot.html)

- Explain to participants that what you'd like them to do is untangle themselves, without letting go of hands, into a circle.
- There will be a mixture of reactions, often including nervous laughter, fun amusement, excitement, trepidation, strong suspicion that it can't be done, and others who may view the task as a somewhat sadistic or inappropriate joke. Often some group members will have done the task before, but this doesn't really matter, each time the task is unique.
- Participants may change their grip so as to be more comfortable, but they are not to unclasp and re-clasp so as to undo the knot.
- · Stand back and see what happens.
- Be prepared to see little progress for quite some time (up to 10 minutes). However, once
  the initial unfolding happens, the pace towards the final solution usually seems to
  quicken.
- However, because each occasion is unique, there are also odd times when a very fast solution falls out - too easy. In such cases, you ask a group to try the task again - its usually a bit harder second time around. Occasionally, the task seems too hard and participants seem to make almost no progress. Let them struggle for about 10 minutes, then you can offer the group one unclasp and reclasp - they need to discuss and decide what unclasp-reclasp would be most useful.

#### **Facilitator notes**

- A switched-on facilitator can get a lot of information about participants in a short space of time with this activity.
- Stay at a moderate distance, allowing the group to handle the activity with feeling like they're being too closely observed; but maintain good hearing contact and be ready to step in to help answer questions or change the direction of the activity quickly when appropriate.
- It is relatively easy to notice who's talking, who's not, who seems comfortable, who doesn't. Also note that sometimes the natural leaders are not in a good position to lead-do they try to dominate inappropriately or do they sit back appropriately and just do what they can. Sometimes, a new leader emerges from being in an opportune position in the knot. This can offer this person a significant boost. Also, almost everyone gets a positive sense of having played his or her part. Some people have difficultly enjoying the activity due to their uncomfortableness physically (e.g., obese, very tall, or inflexible people may find the activity particularly awkward).
- It is important to provide appropriate help if the activity proves too difficult. This might be
  encouragement that it can be done (some groups lack confidence and would give up too
  early), helping a couple of people communicate to find a solution to part of the knot, etc.
  Or this might be allowing an unclasp-reclasp. How much to give is a fine balancing act.
  The task should be challenging, but especially as an initial activity, it should give the
  group some initial confidence and momentum in being able to work together to solve
  problems.
- Be prepared to have at least a short debrief, e.g. by asking "How well did you think the
  group worked together?" and "What could have been done differently?" or "What do you
  think you've learned from this activity which can be applied in future activities?"

For the remainder of the day the wilderness counselor and nurse practitioner can lead CPR and wilderness first aid. They can also take the participants on a mindful walk. During this walk, campers can share their knowledge about the outdoors and be encouraged to ask questions about things they see.

## Day 3: Rock-Climbing Day 1

Warm Up Activity: Today marks the beginning of outdoor adventure activities. The past two days were spent setting up the group goals, team building, and learning an overview of the outdoors. Today the group will begin to rock climb and take some risks. This activity is a good warm up to put everyone's fears out on the table. The fears

### Fear in a Hat<sup>5</sup>

### **Equipment:**

Paper and pen/pencil per participant; Hat, tin or bag.

#### Time

5 minutes + 1-2 minutes per participant, e.g., 15-20 minutes for a group of 10.

### **Brief description:**

People write personal fears anonymously on pieces of paper which are collected. Then each person reads someone else's fear to group and explains how the person might feel. Set an appropriate tone, e.g., settled, attentive, caring and serious.

- The tone could be set by introducing the topic of fear and explaining how it is normal and natural at this stage of program that people are experiencing all sorts of anxieties, worries and fears about what might happen. A good way of starting to deal with these fears is have them openly acknowledged lay them on the table, without being subject to ridicule. Having one's fears expressed and heard almost immediately cuts them in half.
- Can be done as the first activity in a program, during the initial stages or well into the program.
- Ask everyone, including the group leaders, to complete this sentence on two pieces of paper (anonymously): "In this trip/group/program, I am [most] afraid that..." or "In this trip/group/program, the worst thing that could happen to me would be..."
- Collect the pieces of paper, mix them around, then invite each person to a piece of paper and read about someone's fear.
- One by one, each group member reads out the fear of another group member and elaborates and what he/she feels that person is most afraid of in this group/situation. No one is to comment on what the person says, just listen and move on to the next person.
- If the reader doesn't elaborate much on the fear, then ask them one or two questions.
   Avoid implying or showing your opinion as to the fear being expressed, unless the person is disrespecting or completely misunderstanding someone's fear. If the person doesn't elaborate after one or two questions, leave it and move on.
- When all the fears have been read out and elaborated on, then discuss what people felt and noticed. They can also collaboratively discuss ways to cope or face the fears or the trip.
- This activity can be done with the following sentence: "With regard to my diabetes, I am [most] afraid that..." or "With regard to my diabetes, the worst thing that could happen to me would be..."
- The facilitator can then initiate a discussion about ways the teens cope/face/avoid the fears they have with their diabetes.

### Outdoor Experiential:

After the warm-up, it will be time to begin the rock-climbing segment. The first day involves minimal risk. The rock climbing tutorial will led by the

<sup>&</sup>lt;sup>5</sup> http://www.wilderdom.com/games/descriptions/FearInAHat.html

wilderness counselor. Topics will include know tying, rock climbing language, and using carabineers. The participants will then participant in some rappelling exercises. They will have work in pairs or groups of three to support each other during this exercise.

Campfire/Free Time/Journal Time

## Day 4: Rock-Climbing Day 2

### Warm Up Activity:

Survival Scenario<sup>6</sup>.

#### Equipment

- Scenario briefing (1 per group)
- List of items/people (1 per person)

#### Summary

• A classic group communication & decision making exercise. People get intensely engaged because the "survival stakes" are high and none of the decisions are easy. Works for a wide variety of ages and purposes, indoors or outdoors.

#### **Group Size**

• 5-10

#### Time

- Total ~45-100 mins
- 5-10 minutes briefing
- 15-30 minutes exercise time
- 5-10 minutes scoring (for select equipment scenarios)
- 20-30 minutes debrief & discussion

#### Overview - Group Survival Scenario Exercise

- A classic group communication and decision making exercise, with many variations.
- Works for a wide variety of ages and purposes, indoors or outdoors.
  - · Provide instructions & hand out materials
  - Set a time limit (~15-30 minutes)
  - Let the group go answer questions, watch, & observe!
  - Debrief

### Scenario: Choose Survival Equipment

Your plane crashed...your group needs to choose the 12 most useful items to survive... Choose / rank equipment items in terms of their relative survival value:

- The instructor will have a list of items that from which the group can choose. There should be at least twice as mane items allowed making it challenging. Some items included should be flashlight, food, water, etc. No diabetes equipment should be on the first list.
- Participants choose/rank the items individually
- Because everything changes when a person has diabetes, that aspect should be introduced to the exercise. After the individuals create their personal survival list, a second list should be given to them. This list should have all of the original items plus other items included such as insulin, glucose, syringes, etc.
- Discuss choices/rankings in small group and come to a group consensus
- Possible scenarios:
  - Lost at sea or island survival (shipwreck)
  - Desert (plane crash)
  - Space or Moon

#### **Possible Debrief Questions**

- How were decisions made?
- How did priorities change when the diabetes aspect was introduced?
- Who influenced the decisions and how?
- How could better decisions have been made?
- · How was conflict managed?

<sup>&</sup>lt;sup>6</sup> Adapted from (http://wilderdom.com/games/descriptions/SurvivalScenarios.html)

- How did people feel about the decisions?
- How satisfied was each person with the decision (ask each participant to rate his / her satisfaction out of 10, then obtain a group average and compare / discuss with other groups' satisfaction levels)
- What have you learnt about the functioning of this group?
- How would you do the activity differently if you were asked to do it again?
- What situations at work/home/school do you think are like this exercise?

After the debriefing period from the first scenario, the participants should be given a short break to decompress due to the intensity of activity. At the conclusion of the break participants can gather for the second warm-up activity of the day.

### Willow in the Wind<sup>7</sup>

This activity focuses on building trust and physical contact. These activities mirror situations that will occur in the rock climbing experiential. The language used before falling is modeling after the belay commands of climbing.

Equipment: large area preferably with soft ground for falling, e.g. grass.

Time: ~5 mins per person in group

### Brief description:

In groups of about 8, a person in the middle closes his/her eyes, does a "trust lean" and is "passed around" the group. Requires good facilitation and fairly mature group.

- Provides a gentle, but important and challenging activity to begin building genuine trust amongst people.
- Group members should already have spent time together, know each other's names, etc.
- Establish a genuine tone; whilst fun is allowed, the primary objective is looking after and caring for one another. This requires a calm, supportive atmosphere. If participants are unable to genuinely sustain this kind of atmosphere, then look for a less serious activity. There is the potential for physical and psychological injury.
- The group needs to be taught correct spotting technique:
  - one foot in front of another
  - arms outstretched, elbows locked, fingers loose
  - ready and alert
- In groups of about 8, one person volunteers to be the "willow" in the middle. Facilitator demonstrates the "willow":
  - feet together
  - closes his/her eyes
  - arms crossed and hands on shoulders
  - keep butt cheeks tight and body straight
  - establishes contract with group (see below)
  - does a "trust lean" and allows him/herself to be "passed around" the group.
- The final step before leaning is to create a contract between the "willow" and the group. It can go like this:
  - Willow: "I am ready to fall. Are you ready to catch me?"
  - Group: "We are ready to catch you, Fall away."
  - · Willow: "Falling."
  - Group: "OK"
- Important: Ensure the group is tight, should-to-shoulder, arms outstretched. In this position, hands should almost touch the person standing in the middle. This ensures that the initial fall will be very gentle. Gradually the group can ease back to allow a more expansive lean. Distribute large and small people evenly, to avoid weak points in the

Adapted from (http://wilderdom.com/games/descriptions/WillowInTheWind.html)

circle.

- The "willow" should allow him/herself to be passed around by the group as long as she/he likes (usually a couple of minutes). When he/she has had enough, simply open eyes, stand up, and thank the group.
- As a debrief or an intervention if a group isn't creating a trusting atmosphere, I've asked
  people to individually rate out of 10 how supported they felt by the group -- and show this
  to the group by holding the number of fingers up. This allows the facilitator to draw out
  more objectively which people felt supported and what else the group might do to support
  more people.
- This can be related first to diabetes. Possible questions may include: "Who do you trust to tell about your diabetes? What makes them a trusting person? What would happen if one member of the group didn't know you were about to fall? What could happen if one of your friends doesn't know you have diabetes? What could happen a member of your diabetes team was unaware of what was going on?
- Then the activity can be related to rock climbing. Questions can include: "What would happen if one member of the group didn't know you were about to rappel? What can you do to ensure that the activity is safe for everyone involved?"

Outdoor Experiential: Now it is time for the wilderness instructor to facilitate rock climbing with the teenagers. Because of the structuring, that just occurred, the participants should now learn through the experiential and be able to relate the concepts back to their life and their life with diabetes. This will take most of the rest of the day.

Since this has been a long day, the group should be given some time to relax after dinner.

### Journal Reflection:

Write about a moment in which you were able to trust someone today. What allowed you to trust them?

Write about a time you were able to trust someone in regards to your diabetes. What allowed you to trust them?

## Day 5: Rock Climbing Day 3

### Warm-Up Activity:

Strong Mountain, Supple Tree8

The group has now spent four nights in the wilderness and seen four sunrises. This is more that many of them have experienced in their lifetime. This activity will be a gentle wake-up activity and help to tie feelings they are having about nature to feelings in their body.

Objective: Introduction to nature, feeling your body, strengths and weaknesses.

Activity: Shake out the arms and legs, loosening up before beginning. The first pose will be the mountain pose. Have the teen stand with the insides of her feet together, feeling her feet spread and connect to the ground. Tighten the leg muscles, tuck in the posterior, let arms relax by the sides and look straight ahead. "Picture a spot between your eyebrows, and slowly trace a line from your forehead all the way to the ground," you might say. Through this exercise adolescents direct their attention inwards. Energy stays focused-ceasing to scatter-as 'mountains' become ever more still. Once the participant has got 'mountain' down, give 'tree' a try. Begin from the child's sturdy mountain pose. Then, have her lift one knee up so it's parallel to the ground, bring it straight out to the side, and tuck to top of her foot on the inside of her upper leg. As a final touch, the child can place the palms or her hands together and touch her thumbs to her chest. Hold this more for ten seconds or so. Repeat, using the other leg.

Tip: It's less important to get the poses technically correct that it is to reinforce the metaphors of strength, flexibility, and balance. Have the child truly feel what it is to 'be' a mountain and a tree, closing her eyes and breathing deeply as she calls up these images. Remember, branches get buffeted around by strong winds but bend instead of breaking, and mountains endure over millenniums.

### Outdoor Experiential: Advanced Rock Climbing for a majority of the day.

### **Debriefing Activity:**

The group has just completed their first cycle of outdoor experientials. They have taken risks, trusted in others, and reflected on their experiences. This activity helps to acknowledge their hard work and for the group to recognize each other.

### Anonymous positive feedback<sup>9</sup>

Anonymous positive feedback: Have everyone stick a blank sheet of paper on their back. Students are then asked to then mill around and write honest, positive feedback on people's backs. Student can then read and discuss the feedback they received.

Adapted from Carmen, R. (2004) Helping kids heal, Bureau for at-risk youth. (www.guidancechannel.com)

<sup>&</sup>lt;sup>9</sup>Adapted from http://wilderdom.com/group/SocialSupportWaysToPromote.html

## **Day 6: Community Service Day**

Each Outward Bound trip contains a service element. It is a chance for the participants to give back to the environment or others for all they will get out of the experience.

The particular service activity will be dependent on the location of the particular trip and the needs of that area. Some examples could be cleaning up a trail, rebuilding a stream crossing bridge, laying gravel trails, clearing brush, painting, splitting wood, assembling first aid kits, or volunteering for the day at a nearby diabetes camp for younger children.

After working hard at a service project all day, the participants should have some downtime to relax, journal, and socialize.

Journal Reflection: "The best way to find yourself is to lose yourself in the service of others." Mahatma Gandhi

### **Day 7: Ropes Course**

By Day 7, the group has hopefully learned the importance of teamwork and developed a sense of group cohesiveness. The wilderness instructor will primarily lead the activities of today. Low Ropes activities are a mix of team-building activities and low-risk challenges. They help the team to prepare for the high-ropes course the following day. Although these activities may seem therapeutic and appeal to the child life specialist to lead, they are built in to the Outward Bound program. The wilderness counselor will have extensive experience facilitating these activities and will be aware of physical and psychosocial elements involved.

Low-ropes course activities include: The Spider Web, The Wall, The Teeter Totter. These all require elements of communication, problem-solving, physical contact, trust, and calculated risk. The activities will take most of the day with meal and snack breaks provided.

Free time provided in the evening. Most likely, the group has developed cohesiveness and friendships are being formed. The free time allows time for the adolescents to socialize and participate in typical teen discussions and activities.

#### Journal Reflection:

"You gain strength, courage and confidence by every experience by which you really stop to look fear in the face. You are able to say to yourself, "I lived through this horror. I can take the next thing that comes along." ~Eleanor Roosevelt

How does this quote relate to the activities of today? How does it relate to your life outside Outward Bound?

## **Day 8: High Ropes Course**

Warm-Up Activity: After a week of working and living together, group dynamics will be emerging. The following activity provides the group a chance to reflect on how they see themselves and others in relation to group as a whole. It provides a chance for the members of the group to consider and redirect their inter and intrapersonal goals.

**Equipment:** Each group member needs to select one object from nature to represent themselves **Time:** 30-40 minutes

### Group Mandala<sup>10</sup>

- Allows symbolic exploration of group structure and dynamics, and revealing of personal feelings towards others
- Each person is represented by an object they choose themselves; objects are then "caste" like dice
- Each person then shares how he or she feels about the position in which his or her object has landed (uses psychoanalytic technique of "projection")
- Through various rounds, participants get to modify/adjust the position of their object until
  each individual is satisfied with where they sit in relation to the other objects (group
  members)
- Logistically, a simple activity; facilitation-wise, a potentially difficult and challenging activity; lots of potential for subtle and deep group work
- Group sizes of approximately 7 to 9 are ideal, but can be done with as few as 5 or as many as 12.

#### What is a Mandala?:

Mandala is Sanskrit for circle, polygon, community, and connection. The Concise Macquarie dictionary defines mandala as

"a mystic symbol of the universe, in the form of a circle enclosing a square; used chiefly by the Hindus and Buddhists as an aid to meditation".

Mandalas, however, need not be so narrowly defined. What seems to tie them together is their patterned interconnectedness.

#### **Description of Group Mandala**

Each of these steps should be revealed one by one. This helps to enhance the unknowns of the activity (and therefore, any experienced meaning is largely socially constructed by participants themselves).

Also note, the facilitator should consider whether or not participate in the group - either way can be appropriate or not, depending on the nature of the group and the facilitator.

- Participants in a group select a small object collected from the outdoors
- Standing in a circle, ask a participant for their hat (or use some other container).
- Place your object in the hat, and pass the hat on to the next person who does the same.
- Caste the objects, with some care, some randomness (like rolling dice) (may use casting mat, e.g., a sarong or coat, particularly if using personally significant objects). Try to use the floor rather than a table.
- Ask people to look at the objects and then take turns sharing how they feel about the place of their object in relation to the other objects in the group.
- One-by-one then go around in a circle and have each person move his/her object to a
  new position, explaining to the group why it feels more comfortable for their object to be
  in this different place.
- Ask the group to discuss and collective create (move/shift) their objects into an ideal arrangement.
- Debrief: What do you think of this activity? Why?

<sup>10</sup> Adapted from (http://wilderdom.com/games/descriptions/GroupMandala.html)

- What happened in this group during this activity?
- How did it feel not having control initially when the lots were cast?
- What did you do to become more satisfied with your place?
- Think about all the people involved in helping you with your diabetes. What elements affect your position within a group?
- What are things you can do to become more satisfied with how you fit into that group?

#### **Facilitator Notes**

Overall, the exercise works well, but it can be a challenge initially to process as there is often some resistance and anxiety associated with the apparent open-endedness of the activity. At a critical point when a student challenged me on the seeming pointlessness of the activity I explained that from a psychodynamic point of view the ultimate activity is give someone a blank piece of paper and ask them what they see. Whatever the person replies with would be an indicator of their inner psychological state, because there is relatively little external stimuli. When we give people complex activities, it becomes difficult to distinguish what parts are to do with the person and what parts are due to the nature and structure of the activity itself. Thus, I suggested, it is the very open-endedness of the activity which is the point of the exercise from a psychodynamic point of view. This comment appeared to serve as a catalyst to help guide the student discussions behind the immediate details of the activity and more or less from this point they were able to make many interesting connections and insights to psychology and outdoor education.

## Outdoor Experiential: High-ropes course<sup>11</sup>

High Ropes activities tend to focus on confronting one's fears, emotional self-management, self-confidence, risk-taking, etc. High Ropes activities tend to be for individual climbing, but there are some High Ropes activities, such as the Dangle Duo, which require pairs of people to climb together and help one another.

High Ropes activities often involve participants who are not climbing to take responsibility for belaying, communication and supporting someone else who is climbing. In this way, High Ropes courses can also be used to develop compassion, empathy, communication and cooperation amongst group members.

### **Evening Campfire**

Journal Reflection:
Describe the use of safety nets today?
What/Who are the safety nets in your life outside Outward Bound?

<sup>11</sup> Adapted from (http://www.wilderdom.com/ropes/RopesHigh.html)

## Day 9: River Day 1

Warm Up Activity: This activity is designed to help set up traveling down the river as a metaphor for life. Ask the group to think about significant events and people over the course of their life thus far and what they imagine about their life to come. The events and people have helped to shape who the individuals are today and who they will become. They have also helped to shape the lives of others and their environment. This is similar to how the water of a river and its surrounding environment help to shape each other. The water's direction is guided by the bends and twists in the banks. There are rocks that it must pass over and this created rapids. The water, in turn, helps to slowly shape and change the river banks over time.

### Lifeline<sup>12</sup>

Time Required: 10 minutes for individual drawing, 3 minutes per participant for "reporting out" afterwards.

Props Required: scratch paper and marker(s) or crayon(s), at least one per person. Process:

- Distribute materials
- Instruct participants to draw a river of their life, noting whatever events, people, or places they think important.
- Have the participants share with one another the important events they included.

#### Discussion Questions:

- Is anything left out? Events? People?
- Ask about those members that included diabetes and those that didn't. Why? Why not?
- Where is the timeline busy or crowded, versus simple or blank?
- What stages is the timeline divided into?
- What are the milestone or marker events associated with these stages?
- What rests at the "center" of your timeline and life?
- Do marker events involve people, events, accomplishments, etc?
- Who are the important people in your life?
- How might significant others draw your timeline?

Outdoor Experiential: Kayak training. The wilderness instructor will introduce kayaking. The group will divide into pairs and spend the day practicing kayaking skills with their partner.

Campfire Discussion: Describe an interesting or funny moment that happened with your kayaking partner.

<sup>&</sup>lt;sup>12</sup> Adapted from (http://www.firststepstraining.com/resources/activities/archive/activity\_lifemap.htm)

## Day 10: River Day 2

Warm-Up Activity: Today will be a long day of outdoor experientials and this short warm up should be used. The team will have to plan and pack for an overnight trip down the river, away from base camp. The group will also need to leave early enough to spend the day on the river and still have time to set up camp before sunset. The following is a metaphor relating type-1 diabetes to traveling down a river. The group should be relaxed. They can close their eyes and listen to the following passage, trying to visualize what they hear. Afterwards, the facilitator can open the discussion with the group. Leading questions could be, "What are some suggestions for helping to keep the boat between the shores? How do you relate to this passage? Do you think this is an accurate metaphor? What parts do you agree with? Why? Why not? What suggestions do you have for trying to keep your blood sugar levels in a safe area?" River Metaphor<sup>13</sup>

"Imagine yourself trying to steer a boat, floating down stream on a river. The river is flowing in a loop and is therefore, contrary to ordinary rivers, partially repeating its course. During each round, however, the loop is changed by new bends into different patterns in a seemingly random way. Moreover, the gearing of the wheel, as well as the slowness of the boat's response, is also continually changing in a seemingly random way. Consequently, you cannot but roughly know the effect of your maneuvers. Towards the left shore, the fresh air on the river is gradually changing into a gas that initially makes you dizzy and, closer to the shore, eventually unconscious. Towards the right shore, on the other hand, the air is gradually changing into a poisonous gas, which you cannot smell until it gets extremely concentrated. If you breathe this gas for a while in too high a concentration, your body will in due course become injured. Complete darkness reigns all the time, so you can never see anything whatever of your surroundings. Neither can you ever hear any sounds to guide you between the shores. You have been told to obtain one type of information only: now and then, you are able to trigger a flashgun that for a moment illuminates a spot on the shore on each side. This gives you a rough measure of your position sideways between the shores, but you cannot tell whether you are approaching either of them. You make notes of these positions and their times. You may also make notes of your maneuvers at the wheel. For important reasons you will not use the flashgun too often, so you miss the rapid changes of your position sideways. Note that you can neither see anything when looking forwards nor even when looking backwards! Consequently, you can get no direct information about the future course and your only direct information about previous courses is in your notes from those moments when you used the flashgun. If you have made your notes during numerous rounds on the river, and you are clever and educated enough, you may scrutinize your notes trying to make estimations of average courses and probabilities of separate events. However, you can never be certain regarding any single future event! The boat, designed by Evolution, is normally equipped with an automatic steering system. This system continuously measures the distance to the shores as well as a multitude of states, influencing the course of the boat. The collected information is processed and fed back to turn the wheel so that the boat remains almost on course. As a result, there is never any risk of aetting too close to the shores. Unfortunately, in your boat, this feedback is not working, so you have to turn the wheel yourself."

Outdoor Experiential: Plan/Pack for overnight river trip. Travel down the river until near dusk and set up camp.

### Campfire

<sup>&</sup>lt;sup>13</sup> Adapted from (http://www.durietz.se/diabetes/metaphor.php)

## Day 11: River Day 3

Wake up and continue down the river. Switch kayak partners.

Shuttle back to camp

Free Time

Campfire

Journal Reflection:
"You know a dream is like a river
Ever changin' as it flows
And a dreamer's just a vessel
That must follow where it goes
Trying to learn from what's behind you
And never knowing what's in store
Makes each day a constant battle
Just to stay between the shores"
~ Garth Brooks

## Day 12: Expeditioning Day 1

Warm Up Activity: This warm up can be an introduction to expeditioning. The participants will be trying to find their way using unfamiliar methods. It can also be a metaphor for trying to navigate their diabetes. Frustration often occurs between teens and their parents, because they are trying to traverse the unknown territory of diabetes. They must find new ways of communicating with one another.

### Limited Senses<sup>14</sup>

What: An initiative that focuses on communication and leadership dynamics.

Group Size: from 8 on up.

Time: 30 minutes.

Props Required: One blindfold for each participant.

Objective: For the group to line up in numeric order without talking.

**Activity Instructions:** 

Create a clear space in a large area. Give each participant a number, instruct them not to share it with anyone, and then blindfold each participant. Tell them that they are not allowed to talk. The goal is to put themselves in numeric order without seeing or talking. The real interesting part is that you do not give the participants consecutive numbers. Skip around with little regard to the pattern, for example 1,2,3, 5, 8, 9, 10, 14, 17, 18. You should always have a one and the number that represents the number of participants in the activity.

Ask for questions. Ready, set, go!

#### **Facilitator Notes:**

Frustration will occur when participants use various methods to communicate, foot stomping, tapping, etc. without finding the missing numbers. You will see some participants give up. After some time, tell the group that there are some missing numbers. You will see leadership emerge, and watch how fast they get it together.

#### **Debrief Questions:**

- How did people feel about the decisions?
- How satisfied was each person with the
- What have you learned about the functioning of this group?
- How would you do the activity differently if you were asked to do it again?
- What situations at work/home/school do you think are like this exercise?
- What are creative ways you have learned to navigate your diabetes?

Outdoor Experiential: Reading maps/ reading a compass/ signs in nature/using the sun and landmarks

Adapted from Becky Baum of the Whitten Group, Inc. (http://www.firststepstraining.com/resources/activities/archive/activity\_limited\_senses.htm)

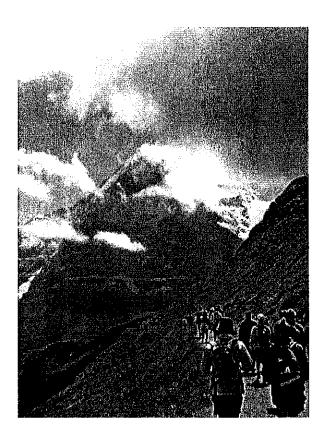
## Day 13: Expeditioning Day 2

Warm Up Activity:

Repeat Strong Mountain, Supple Tree<sup>15</sup>.

How has this activity changed/remained the same for participants one week after originally attempted?

Outdoor Experiential: The group will be given a geographical point that they need to find. They will need to work as a team to navigate and find their way.



Return to camp after the expedition. There should be some free time after two exhausting days.

Journal Reflection: "See how nature - trees, flowers, grass - grows in silence; see the stars, the moon and the sun, how they move in silence. We need silence to be able to touch souls." ~ Mother Theresa

Reflect on this quote. What are you feelings about the next three solo days?

<sup>&</sup>lt;sup>15</sup> Adapted from Carmen, R. (2004) Helping kids heal. Bureau for at-risk youth. (www.guidancechannel.com)

## Day 14: Solo Day 1

The solo of Outward Bound has been a longstanding tradition of the program. The camper usually packs what they need to survive for three days alone in the woods. The teens on this trip should be sent out for the entire day but will reconvene as a group at night. Also, while the campers may feel completely alone, the counselors will be able to check on them from a distance periodically throughout the day. This day will require incredible responsibility and planning by the teen. They will need to make sure that they have the food they need for the day and also all medical supplies. It should be strongly urged, however, that they should return to base camp if they forgot anything or are not feeling well! The facilitators should encourage the teens to adequately plan and stay out all day, but be completely open and receptive for them to return to base camp if they need to. The goal is to spend the day in nature and in silence to reflect on thoughts and experiences. This goal, however, is less important than camper safety!

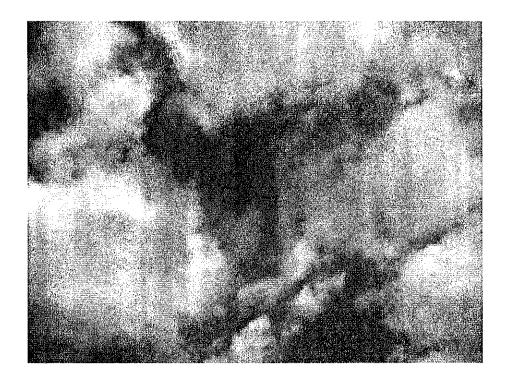
Outdoor Experiential: Before the trip began, the parents have received instructions to write their teenager a letter. They have also been asked to have the participant's siblings and one or two of the teen's close friends to write a letter. This letter should include topics such as: specific aspects of the teen that person admires, features of their relationship they value, how they worked together to get through a hard time, how they worked together to get through an aspect of the teen's diabetes, what they hope for the future, how they would like to help with the teen's diabetes management, poignant memories, and inside jokes. Instruct the teens to pack their journal in their gear and give them the letters before departure. Once they has settled in their spot for the day, they can open and reflect on the contents of the letters.

Debriefing Activity: Free time upon returning to camp after an intense day.

## Day 15: Solo Day 2

Today the teens will spend a second day in the wilderness alone. Ask them to take their journals with them again today. Today, before they leave, ask them to write a letter to their parents and also a friend of sibling if they wish. This letter could be a response to the letter they received from their parents and also can include topics such as: features of their relationship they value, how they worked together to get through a hard time, how they worked together to get through an aspect of their diabetes, what they hope for the future, how they want their parents/friend to help with their diabetes management, aspects of their diabetes management they would like to handle on their own, poignant memories, and inside jokes.

Debriefing Activity: Free time upon returning to camp after an intense day.



## Day 16: Solo Day 3

Today the teens will spend a third day in the wilderness alone. Ask them to take their journals with them again today. Today, before they leave, Ask them to write a letter to their diabetes. You can agree that this may sound silly, but you would like them to write a letter telling their diabetes how they feel. Also, if they wish, they can write a response from their diabetes.

Secondly, they should write a letter to themselves. They can reflect on their experience in the wilderness thus far. They can write about their hopes for the future, their fears, draw pictures of what they see around them, create poetry, lyrics, or artwork.

Debriefing Activity: Tonight there can be a group check-in meeting. The participants have spent the majority of the last three days alone and have lots of time to step back and process everything. There is nearly one week left and tonight would be a good time to have a check-in meeting. The group can review the goals they set at the beginning of the trip. They can decide which ones still seem relevant, which ones the think they are moving towards, which ones they want to work more towards, etc.

## Day 17: Sea Day 1

### Warm Up Activity:

Toxic Waste (Life Saving Serum)<sup>16</sup>

Equipment

1 Toxic Waste kit with activity guide & facilitation notes

#### Summary

Equipped with a bungee cord and rope, a group must work out how to transport a bucket of "Toxic Waste" and tip it into the neutralization bucket. Toxic Waste can be used to highlight almost any aspect of teamwork or leadership.

#### Time

Total time ~30-50 minutes, consisting of: 5 minute briefing 5 minutes group planning time, no action 15-30 minutes of active problem-solving 10 minutes discussion/debrief

### **Group Size**

Group sizes of approximately 7 to 9 are ideal.

#### **Toxic Waste**

- This is a popular, engaging small group initiative activity which always "works", providing a rich teamwork challenge for about 30-45 minutes. Involves thinking, imagination, action, fantasy, risk and an attractive solution.
- The challenge is to move the toxic waste contents to the neutralization container using minimal equipment and maintaining a safe distance within a time limit.
- Moderately difficult avoid using with groups who are still in the early stages of group development. Works best towards the end of a program and/or after the group has come together and dealt with basic teamwork issues.
- Can be done indoors or outdoors; outdoors is more dramatic because water can be used as the "toxic waste" instead of balls.

### Set-Up

- Use the rope to create a circle at least 8 ft in diameter on the ground to represent the toxic waste radiation zone. The larger the radiation zone, the more difficult the activity.
- Place the small bucket in the center of the radiation zone and fill it with water or balls to represent the toxic waste.
- Place the neutralization bucket approximately 30 to 50 feet away. The greater the distance, the more difficult the activity.
- Put all other equipment (i.e., bungee, cords, and red herring objects (optional)) in a pile near the rope circle.

#### **Directions**

- The challenge is for the group to work out how to transfer the toxic waste from the small bucket into the large bucket where it will be "neutralized", using only the equipment provided and within a time frame. The waste will blow up and destroy the world after 20 minutes if it is not neutralized.
- Anyone who ventures into the radiation zone will suffer injury and possibly even death, and spillage will create partial death and destruction. Therefore, the group should aim to save the world and do so without injury to any group members.
- The rope circle represents the radiation zone emanating from the toxic waste in the bucket. Emphasize that everyone must maintain a distance (circle radius) from the toxic waste wherever it goes, otherwise they will suffer severe injury, such as loss of a limb or even death.
- Give the group some planning time with no action e.g. 5 mins, then start the clock and indicate its time for action, e.g., 15 or 20 mins.

Adapted from (http://www.wilderdom.com/ropes/toxicwaste.html)

#### **Facilitator Notes**

- Toxic Waste is not an easy exercise and most groups will benefit from some coaching along the way.
- The solution involves attaching the cords to the bungee loop, then guiding the bungee
  with the strings to sit around and grab the toxic waste bucket. Then with everyone pulling
  on their cord and with good coordination and care, the toxic waste bucket can be lifted,
  moved and tipped into the empty neutralizing bucket.
- If someone breaches the toxic waste zone, indicated by the circle, enforce an appropriate penalty e.g., loss of limbs (hand behind back) or function (e.g., blindfolds if a head enters the zone) that lasts for the rest of the game. If a whole person enters the zone, they die and must then sit out for the rest of the activity.
- If the group struggles to work out what to do, freeze the action and help them discuss.
- If the group spills the waste entirely, make a big deal about catastrophic failure (everyone dies), invite them to discuss what went wrong and how they can do better, then refill the container and let them have another go.
- Ideas for varying the level difficulty of the activity:
  - Adjust timeframe
  - Adjust distance between the buckets
  - Include obstacles between the buckets
  - Include red herring objects in available equipment

### **Processing Ideas**

- There are invariably plenty of key communications and decisions during the exercise that provide for fruitful debriefing.
- The exercise will tend to naturally expose processes and issues related to many aspects
  of teamwork, including cooperation, communication, trust, empowerment, risk-taking,
  support, problem-solving, decision-making, and leadership.
- Can be videoed for subsequent analysis and debriefing.
- How successful was the group? e.g. consider:
  - How long did it take?
  - Was there any spillage?
  - Were there any injuries? (Often in the euphoria of finishing participants will overlook their errors and seem unconcerned about injuries and deaths caused by carelessness along the way. Make sure there is an objective evaluation of performance - it is rarely 'perfect'.)
- How well did the group cope with this challenge?
- What was the initial reaction of the group?
- What skills did it take for the group to be successful?
- What would an outside observer have seen as the strengths and weaknesses of the group?
- How did the group come up with its best ideas?
- What did each group member learn about him/her self as a group member?
- What lessons did the group learn from this exercise which could be applied to future situations?

### **Outdoor Experiential: Sailing Training**

### Campfire

# Day 18: Sea Day 2

This will be a long day devoted to continuing sailing exercises.



Reconvene at camp and have free time.

## Day 19: Planning Day

## Warm Up Activity Guided imagery<sup>17</sup>

Ask participants to close their eyes and focus on the floor. Instruct them to take three deep, slow breaths. Speaking slowly and gently, guide to participants through a progressive deep muscle relaxation. Begin with the feet, and work up to the top of the head alternately tensing and relaxing each muscle group. Be sure to caution participants to go at their own pace, not doing anything that causes them pain or discomfort.

Once they are fully relaxed, slowly verbally guide them through the following imagery exercise. Imagine you are walking up a mountain. What kind of mountain is it? Does it have sharp peak or rolling hills? What do you have with you? Are you carrying a pack? What is the weather like? Is it sunny, raining, foggy, cloudy, windy? What time of day is it? Morning? noon? Evening? As you are climbing higher what are you passing along the way? Are there trees where you are? Are there animals? If yes, what do they look like? Are there people? Who are they? Are they walking with you or are you passing them along the way? As you are getting closer to the top what do you see? It is becoming harder or easier as you near the top? Are there obstacles in your way? Do you get around them? You are nearing the peak. A few more steps. As you come over the ridge what do you see? What do you see below you? Are you alone? Are there others with you?

Slowly bring the group back to a state of wakeful awareness. Following the exercise, ask the group members to illustrate in their journal what they visualized. The participants can then share their drawing to the rest of the group.

Outdoor Experiential: Group plan for Mountain Climb

### Campfire

### Journal Reflection:

"Here in the middle of my imagination, right in the middle of my head I close my eyes and my room's not my room, an my bed isn't really my bed. I look inside and discover things that are sometimes strange and new And the most remarkable thoughts I think have a way of being true.

Here in the middle of my imagination, right in the middle of my mind I close my eyes and the night isn't dark and the things that I lose, I find. Time stands still and the night is clear and the wind is warm and fair. And the nicest place is the middle of my imagination when I'm there." ~Ernie

How can you use your imagination to help you?

What are some situations in which you could use this relaxation and imagery skill?

<sup>&</sup>lt;sup>17</sup>Adapted from Clarissa H. Potter & Deborah B. Vilas; Memorial Sloan Kettering Cancer Center, 1996.

## Day 20: Peak Climb

Wake up early! Climb to the top of the mountain!



Tonight should be a celebration. Today the campers pushed themselves and accomplished the incredible feat of climbing a very tough peak climb. The counselors should make sure that the participants do as much as they are able. Some of the participants may be disappointed if they did not make it to the top. However, if they feel like they did as much as they possibly could, they are more likely to be proud of themselves.

**Celebratory Bonfire!** 

## **Day 21: Farewell Activities**

Warm-Up: Journal signing- Each member of the group can leave a message for another member on a page in that person's journal.

A day to themselves. The facilitator can break the group into three sections. They can have the first part of the day to work on a skit to present to the rest of the group. The facilitators can be nearby but not involved.

There also may be a unique aspect of the group that can be used for a meaningful termination activity.

After lunch, the group can have free time.

Campfire activity: Group skit presentations

Journal Reflection: "Often when you think you're at the end of something, you're at the beginning of something else. I've felt that many times. My hope for all of us is that "the miles we go before we sleep" will be filled with all the feelings that come from deep caring-delight, sadness, joy, wisdom- and that in all the endings of our life, we will be able to see the new beginnings." Fred Rodgers

## Day 22: Leave

Congratulations! You have come to the end of you journal as a facilitator for this course. Today the families will be reuniting with their teens to take them home. There should be plenty of time scheduled in for the teens and families to catch up. There should also be ample time for the participants to introduce their families to all of the people they have gotten to know the past 22 days.

Dear,
I am a student at Bank Street College, a Graduate School of Education, located in New York City. In order to graduate, every student at Bank Street is required to complete what is known as an Integrative Master's Project.
For my project I have chosen to create a support group curriculum for adolescents living with type I diabetes.
As part of my study I would like to use photographs of the children engaging in some of the activities I have planned. The photographs will serve as documentation for my study. In order to use these photographs, I need your permission to do so. If you consent to my use of photographs of your child, please fill out the attached Consent Form and return it to me by It should be noted that your child and the school will be identified only by pseudonyms.
The study that results from this project will be housed in the Bank Street College Library. It will have a catalogue number and will be available to students and faculty at Bank Street and on Inter-Library Ioan.
If you have any questions about this project, please do not hesitate to contact me at
Thank you in advance for your consideration.
Sincerely,

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### Independent Study Checklist

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The Library cannot accept your independent study until you have read and checked off each of the I have followed the Commence procedures with the Registrar's and Business Offices. I am presenting the complete version of my independent study and I understand that nothing may be revised, replaced, or added to it at a later date. There is one abstract after the title page of each copy of my independent study. All pages are numbered, including the pages of any appendices. If the thesis includes an unpaginated picture book or other unnumbered inserts, pagination accounts for these pages and resumes on the correct number. The table of contents includes page numbers. All of the pages are in the correct order and face right-side-up. Thave included a copy of the documents(s) granting me permission to use any copyrighted material in the study. Thave included a copy of the document(s) granting me permission to name any individuals or organizations; or I have masked the identity of the individuals or organizations in the independent Persons in any photographs cannot be identified other than by a first name. The left margin is 1 1/2 inches wide. Lhave placed a blank sheet of paper at the beginning and at the end of each copy. Lunderstand that the Library's copy of this independent study will be bound exactly as I am submitting it, and that the Library is not responsible for any errors in organization or appearance.