

## WELCOME TO



# Medical Manual For Counselors and CITs

Parents entrust us to be caregivers for their children while at camp.

This manual will provide you with a foundation for policies and procedures at Camp Possibilities. Thank you for volunteering to be a member of the staff and making a difference in the lives of our campers. Hopefully, you will gain new knowledge and make new friends.

Remember our staff motto: Safe and fun, and in that order!

The Medical Advisory committee for Camp Possibilities

## Blood Glucose Monitoring Policies and Procedures

**Purpose:** People with type 1 diabetes must check their blood sugar a minimum of 4 times a day. Blood glucose measurements reflect insulin action, effect of food, and effect of physical activity. Other factors such as inactivity, illness, and other medications may affect blood glucose values. At camp it is often necessary to make frequent insulin dose adjustments because of increased physical activities or a change in nutrition.

**Supplies:**

- Blood glucose meter (glucometer)
- Blood glucose test strips (note expiration date)
- Single use lancet devices
- Control solution
- Alcohol wipes
- Cotton balls
- Tissues
- Biohazard bags/boxes
- Sharps disposal containers
- Cabin Daily Record blood glucose log (approved paper form)
- Camper blood glucose log (computer data entry)

Blood glucose testing will be done under the supervision of the counselor and/or medical staff. Campers will not carry their own meters. Meters and supplies will be kept in the camper cabins, CLUB MED, at official testing sites (i.e. pool and pavilion), and carried by counselors and medical staff to all activities.

### Care of and Restocking of Supplies:

Blood glucose test strips are sensitive to light, heat, and humidity. If strips are damaged or get wet, test results will not be accurate. Blood glucose test strips and meters must be stored in a cool, dark place. Therefore, **large quantities of test strips should not be kept in cabins.** Counselors should let the medical staff when the supply is low – before running completely out of test strips.

**Quality Control** is performed at the beginning of the camp week on all meters. The procedure is the same as testing with a drop of blood, but a Control solution is used instead of blood. Check the side of the container of Control solution to determine the Control range. Control solution expires 3 months after opening, or on the expiration date, whichever occurs first. **If a**

**control test is out of range, do not use the meter for blood glucose testing. Return the meter to the medical staff and get a replacement meter.**

### **Testing Procedure:**

1. Campers must have a clean finger to avoid test result errors. Campers may wash and dry their hands, or use an alcohol wipe to clean the finger. The finger must be dry before performing the fingerstick.
2. Insert a blood glucose test strip into the meter in the direction of the arrows. The meter requires a code chip. Make sure the code display matches the code number used at camp this year. When the symbol of a drop of blood appears, the strip is ready to accept a drop of blood.
3. The camper performs a finger stick using the single use lancet device. The depth of the finger stick may be adjusted in some single-use lancet devices, according to the camper's preference. If the camper requires assistance, the counselor or medical staff assisting must wear gloves. The side of the finger is the best place to stick. The single-use lancets are NOT indicated for alternate site testing (e.g. forearms).
4. The camper touches the drop of blood to the tip of the yellow window of the test strip. Do NOT put blood on TOP of the test strip. When you see an hourglass symbol and the meter beeps, there is enough blood on the test strip. If needed, the camper may apply more blood to the test strip within 5 seconds. The test result will be displayed on the meter screen in ~6-8 seconds. The camper can apply pressure to his/her finger with a cotton ball or tissue to stop the bleeding.
5. The camper should dispose of the strip, lancet and cotton ball or tissue in the red biohazard bag/box.
6. Record the test result, time, and date in the appropriate columns in the Cabin Daily Record.
7. All blood glucose test results must eventually be transferred into the individual Camper Record. The medical staff will enter these results into a computerized spreadsheet, which will be shared with the family at week's end.

### **Timing and Location**

#### **Blood glucose testing in cabins:**

Before meals and at bedtime, blood glucose testing will be performed in the cabins. It is important to allow only 2-3 campers to test at a time, under the supervision of the counselor. Campers who are waiting must not interrupt or distract the counselor when others are testing.

**Blood glucose testing outside of cabins:**

If a camper is symptomatic, a blood glucose test must be performed. Counselors will carry testing supplies for blood glucose and urine ketones at all times. The counselor will record the camper's name, the date and time of the test, and the test results. Blood glucose test results must be transferred to the Cabin Daily Record before the next meal or bedtime, whichever is sooner. The medical staff will be reviewing this record in order to adjust insulin doses.


**High and low blood sugars:**

After the test is performed, follow the Guidelines for Hypoglycemia and Hyperglycemia, as appropriate. **If a camper has a blood sugar less than 70, the camper must immediately receive treatment as outlined in the Hypoglycemia Policies and Procedures.** The blood sugar must be rechecked in 15-20 minutes. If the blood sugar is less than 80, the treatment will be repeated. The camper may eat once the blood sugar is more than 80.

**If a camper has a blood sugar greater than 250, a urine ketone test must be performed.** The results of the test must be written in the Cabin Daily Record for review by the medical staff. **If urine ketones are present, please inform the medical staff caring for the camper so that insulin may be given promptly if needed to treat the high blood sugar.**

## Glucometer Operation



1. To make sure the display is working properly, turn off the meter, then press and hold  to see the complete display. All segments should be clear and look exactly like the picture. If any segments are missing from the display, there may be a problem with the meter. Call the ACCU-CHEK Customer Care Service Center at 1-800-858-8072.
2. Wash your hands with warm soapy water and dry thoroughly. Dirty or wet hands could affect results.
3. Prepare the lancing device.
4. Insert the test strip into the meter in the direction of the arrows. The meter turns on.
5. Make sure the code number on the display matches the code number on the test strip container. If you miss seeing the code number, remove the test strip and reinsert it into the meter.



**Note:** The meter turns itself off five seconds after the test strip is removed.

Use single-use lancets only.




6. When the blood drop symbol flashes, obtain a drop of blood from your fingertip.
7. Hold the lancing device firmly against the side of your fingertip. Remember that the opening where the lancet comes out is not in the center of the cap. Press the yellow release button. Make sure that each lancet is fully retracted after use.
8. Gently squeeze your finger to assist the flow of blood. This helps you get a blood drop. Touch the drop to the tip of the yellow window of the test strip. **Do not put blood on top of the test strip.**



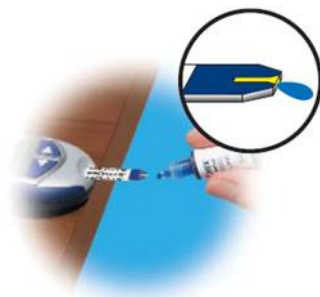
9. When you see  flash, you have enough blood in the test strip. If you applied blood but do not see the flashing  you may reapply more blood within five seconds.
10. The result appears on the display. If you want to flag your test result for a special event, leave the test strip in the meter. See Chapter 3, "Flagging Test Results." Otherwise, throw the used test strip away.




## Glucometer Operation: Running a Control Test

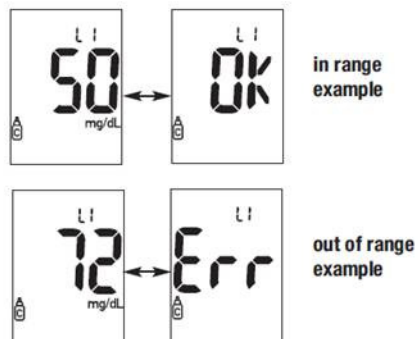
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2. Insert the test strip into the meter in the direction of the arrows. The meter turns on.




3. Make sure the code number on the display matches the code number on the test strip container. If you miss seeing the code number, remove the test strip and reinsert it into the meter.
4. Select the control solution you want to test. You will enter the level later in the test.
5. Place the meter on a flat surface, like a table.
6. Remove the control bottle cap and wipe the tip of the bottle with a tissue.



7. Squeeze the bottle until a tiny drop forms at the tip of the bottle. Touch the drop to the tip of the yellow window of the test strip. **Do not put control solution on top of the test strip.** When you see  flash, you have enough control solution in the test strip. Wipe the tip of the bottle with a tissue then cap the bottle tightly.
8. A result appears on the display, along with the control bottle symbol and a flashing "L." **Do not remove the test strip yet.** Press  once to mark the result as a Level 1. If you tested the Level 2 control, press  a second time.



9. Press  to set the control level in the meter.
10. The control result and "OK" alternate on the display if the result is in range. The range is printed on the test strip container label. The control result and "Err" alternate on the display if the result is out of range. Remove and discard the used test strip.

# Hypoglycemia

Definition: A low blood sugar < 70

## Exceptions:

- Before bed, campers must have a blood sugar  $\geq 100$  (treat blood sugars <100 as lows)
- Some campers may complain of “feeling low” with blood sugars of 70-100, or even  $\geq 100$ . This may occur when the blood sugar is dropping rapidly, or because the camper is accustomed to high blood sugars. If this happens, consult your medical staff.



5 g carbs per tab

3 tabs = 15 g



4 g carbs per tab

4 tabs = 16 g

## Hypoglycemia (low blood sugar): Blood Sugar less than 70

### Causes:

- Too much insulin
- Not enough food (did not eat a meal or snack)
- Increased physical activity

### Signs of hypoglycemia:

- Sweating
- Dizzy
- Shaky
- Irritable
- Confused
- Uncooperative
- Dazed
- Sleepy



### Treatment:

- BG 40-70:** Give 3-4 glucose tablets or 1 juice box (4 oz juice) (15 grams carbohydrate)
- BG < 40:** Give 6 glucose tablets or 8 oz juice (24-30 grams carbohydrate)

### Recheck Blood Sugar

15 to 20 minutes after giving tablets or juice.

### If Blood Sugar is < 80

Give another 10-15 grams of carb  
Recheck blood sugar in 15-20 minutes

### If Blood Sugar is ≥ 80

May need a snack (15 grams of carb)  
If returning to activity such as swimming, basketball, etc.



## Severe Hypoglycemia:

Low blood sugar resulting in **CONFUSION, UNCONSCIOUSNESS,**  
or **SEIZURE**

### Be Alert for:

- A camper who is behaving strangely, or inappropriately. The camper may not cooperate if you request that he/she perform a blood sugar check.
- A camper who is not participating, acting dazed, or argumentative.
- A camper who is thrashing around in his/her sleep, or making grunting noises or having a nightmare.
- A camper who appears to be sleeping, but does not respond when you try to awaken him/her.

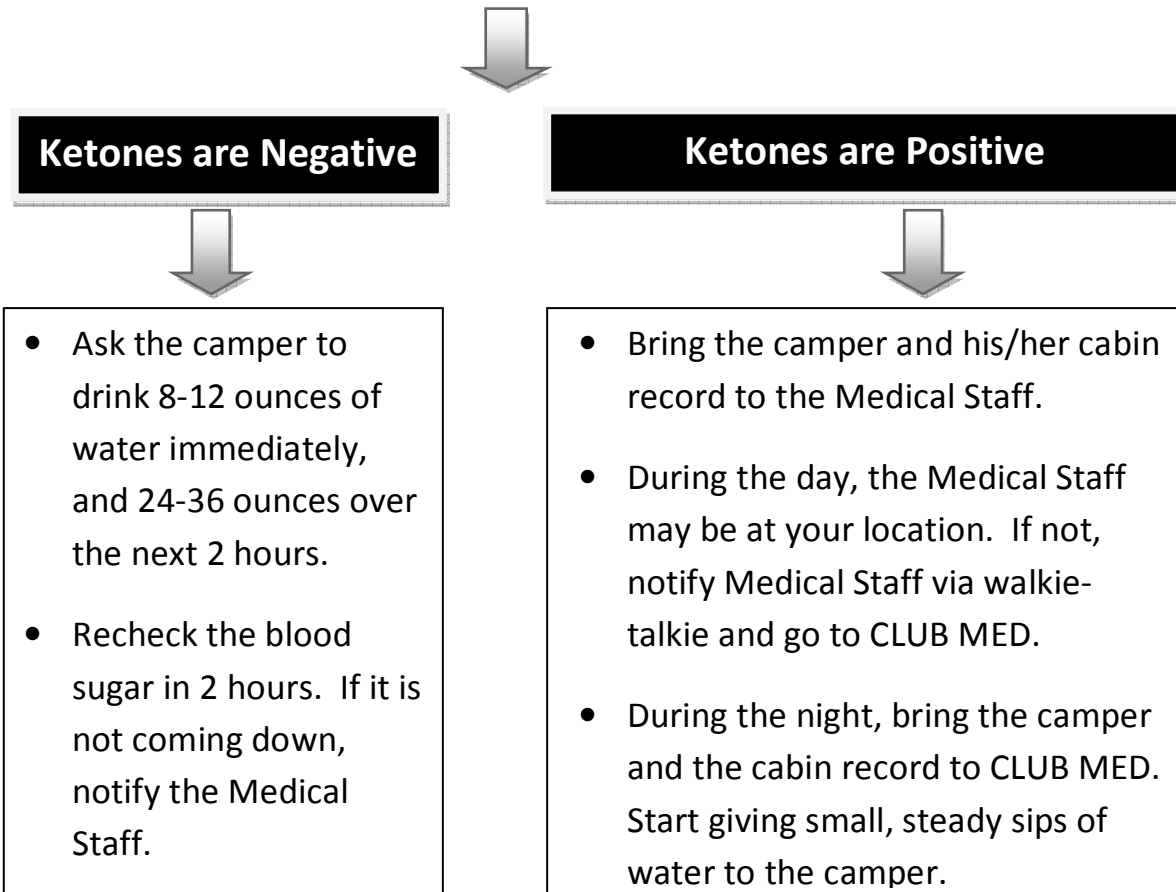
### Respond Quickly:

- **Check blood sugar:** You may need help to physically restrain the camper if he/she is combative.
- **Give glucose gel:** One counselor can check blood sugar while another counselor puts glucose gel into the side of the camper's mouth and massages the cheek to promote absorption of the glucose.
- While you are performing the above treatment, **immediately** send someone to get the medical staff if they are not already present.
- **Try to remain calm.** As soon as the gel begins to work, the camper will improve.
- One counselor must remain with the other campers, calm them, and keep the area around the camper with the low blood sugar clear.
- **If the glucose gel does not raise the blood sugar or improve symptoms, one of the Medical Staff must give Glucagon.**
- If giving glucagon, or considering giving glucagon, the camp Medical Director should be notified as soon as possible. If the Medical Director is not available, another camp physician should be notified.

## Hyperglycemia: Blood Sugar greater than 250

### Check Urine for Ketones

Ask the camper to pee on a ketostick and check for a color change in 15 seconds. Refer to the color chart on the box.



If a camper complains of **nausea**, ask him/her to do a urine ketone check. **If he/she has positive ketones, or if the camper is vomiting, bring the camper immediately to CLUB MED and notify Medical Staff via walkie-talkie.** During the night, send another counselor to CLUB MED to get the Medical Staff on call.

**Note: Please advise the Medical Staff if the camper is unable or unwilling to provide a urine sample for a ketone check. Medical Staff will check for blood ketones using a blood ketone meter.**

# Urine Ketone Testing

## Policies and Procedures

**Purpose:** Urine ketone testing is performed if the camper has a blood sugar of 250 or greater, if a camper is complaining of nausea and/or vomiting, or if a camper is ill (e.g. sore throat, earache, headache, etc.)

Children with type 1 diabetes are ketosis prone. If they become insulin deficient due to lack of injected insulin or insulin delivered by a pump, or if they are ill, they will spill ketones in their urine. Ketones are produced when the liver breaks down fat to make sugar. The lack of insulin can result in a serious complication of type 1 diabetes: Diabetic Ketoacidosis.

**Diabetic Ketoacidosis occurs when the person with diabetes is insulin deficient. If the person does not receive insulin and fluids (water or sugar containing liquids, depending on the blood sugar), the result is severe dehydration, with electrolyte imbalance and acidosis (build up of ketones in the blood). This condition is life-threatening, and may be fatal.**

**Method:** Urine interacts with the reagent on the ketostick and a chemical reaction results in a color change if ketones are present. The strip is compared to a color chart to determine the amount of ketones in the urine: i.e., trace, small, moderate, or large.

**When to perform:** Blood sugar more than 250  
Camper is complaining of nausea or vomiting  
Camper is complaining of illness (e.g. sore throat, headache, etc.)

**Supplies:** Urine ketone test strips  
Color chart for interpretation of results  
Small paper cup (if the camper prefers to pee in a cup rather than urinating directly on the strip)  
Gloves, if the camper requires assistance  
Biohazard bag/box for disposal of ketostick, urine cup, and gloves, if used

### Procedure:

1. Instruct the camper to perform a urine ketone test by urinating directly on onto the strip or into a disposable cup.

2. If the camper urinates in to a cup, dip the ketostick into the urine so that the reagent pad is completely immersed in the urine. Then, tap the strip against the side of the cup to remove any excess urine. Counselors must wear gloves if they handle the urine or the test strip that that been in contact with urine.
3. **Wait 15 seconds** and then compare the strip to the color chart.
4. If **ketones are negative**, ask the camper to drink 8-12 ounces of water immediately and another 24-36 ounces over the next 2 hours. Recheck the blood sugar in 2 hours. If, at the 2-hour check, the blood sugar is not down, notify the medical staff.
5. If **ketones are positive**: Bring the camper and his/her record to the medical staff. If the medical staff is not present at the activity, notify them via walkie-talkie and/or bring the camper to CLUB MED. If the camper is too sick to go to CLUB MED, send another counselor to CLUB MED to alert the Medical Staff on call.
6. Remember to record the blood sugar and ketone test results on the Cabin Daily Record under the correct camper's name, in addition to the water consumed.

**Note: Please advise the Medical Staff if the camper is unable or unwilling to provide a urine sample for a ketone check. Bring the camper to CLUB MED, where the Medical Staff will check for blood ketones using the Precision Xtra Meter.**

## **Confidentiality: The Health Insurance Portability Act of 1996 (HIPAA)**

The purpose of the Health Insurance Portability Act of 1996 (HIPAA) is to secure and protect patient information. As counselors, camp staff, and medical staff, we are bound by this legislation to keep all camper information private and confidential.

### **Specific information included under HIPAA is:**

Name

Address

Date of Birth

Phone Number(s)

Fax Number(s)

Email address

Social Security Number

Health Plan Beneficiary

Account Information

Photographs

Any unique indentifying number, characteristic, or code

All camper health information (as recorded on Cabin Daily Record, Camper Record, Camper Application, Camper Healthy History and Examination, Medical Encounter Form, Accident/Incident Form, etc.)



**Violations of this law are punishable by monetary fines and incarceration.**

### **Maintain Camper Confidentiality by following these rules:**

Share information about campers only with counselors, medical, and camp staff.

Do not gossip.

Do not repeat hearsay.

Keep camper records out of public view.

Keep camper records covered or face down.

Do not talk about campers in front of other campers or in public places.

Keep camper information covered when transporting.

Do not communicate camper information by phone/fax/email/mail without the permission of the camper's parent(s) or legal guardians, and Camp Possibilities, and only through protected sources.

## CLUB MED Policies and Procedures

**Hours of Operation:** CLUB MED will be open routinely for a half-hour after each meal for non-emergent camper health issues (e.g. skin rash, sore throat, earache, splinter, etc.). If an incident occurs at an activity (for example, a camper cuts his toe at the pool), there may be help available on-site. If not, contact Medical Staff for further directions. **All campers coming to CLUB MED must be accompanied by a counselor.**

**Sign-in/Registration:** Campers will be seen on a “first come, first served” basis, OR as assessed by Medical Staff. ALL campers coming to CLUB MED must be registered by a member of the medical staff, even for minor issues such as antibiotic ointment and/or a band-aid.

**Blood sugar and urine ketone testing supplies are available in CLUB MED. If your camper’s blood sugar has not been checked, then do so before they are seen by the nurse or doctor. If the blood sugar is greater than 250, check urine for ketones.**

### Supplies:

1. **Diabetes-related supplies** are kept in CLUB MED. Help yourself when you need to restock your cabin supplies (i.e. test strips, alcohol wipes, lancets, ketone strips, etc.)
2. **Forms:** Extra Cabin Daily Records, Camper Evaluation Forms, etc. will be kept on the shelf in CLUB MED.
3. **Medications:**
  - a. **The only medications allowed in the cabins are epinephrine pens, and inhalers to treat asthma. They must be kept with the counselor. All other medications will be kept in CLUB MED.**
  - b. **Daily Medications and As-Needed Medications:** Medical staff will distribute regularly scheduled non-diabetes medications at meals or at bedtime (i.e. allergy medications, vitamins, anti-seizure meds, etc.). These will be kept in CLUB MED. **Counselors must also leave their personal medications in CLUB MED for the safety of the campers.**

## Common Physical and Mental Health Issues

**Skin Infections:** Many girls with diabetes are prone to yeast infections in the vaginal area. This can be prevented or minimized by removing wet bathing suits, wearing cotton underwear, and proper hygiene. Children with bedwetting problems are also more prone to this infection. If one of your campers has symptoms of itching, burning, or vaginal discharge, check with one of the medical staff. They can provide medication appropriate for treatment depending on the age of the camper and the severity of the infection.

Wet bathing suits can also cause a generalized skin rash in the area of the wet suit. Changing out of wet suits and toweling off well before putting on dry clothes can prevent these problems.

**Sunburn:** Always make sure your campers apply sunscreen in the morning and at water activities. Sunburn will cause an increase in stress hormones, which will increase blood sugar levels. Sunscreen must be applied 20-30 minutes before exposure to sun in order of the chemicals to be properly absorbed by the skin.

**Swimmer's Ear:** This painful condition can occur after swimming in a pool. If your campers complain of earache, bring them to CLUB MED during normal hours or speak to one of the medical staff.

**Dehydration:** In the heat of the summer, it is important that campers remain well-hydrated. All campers will be given their own plastic water bottles. Please use a Sharpie pen to write each camper's name on his/her water bottle. It is up to the counselors to make sure that campers drink plenty of fluids throughout the day. There are water coolers in the dining hall, at the pool, tennis courts, pond, and close to the campers' cabins.

**Bedwetting:** Be prepared for bedwetting, especially with the younger campers. Extra sets of sheets will be available in CLUB MED. Remember to wear gloves when handling bed linens that are wet with urine. Place them in a garbage bag, and bring them to CLUB MED. Some children are very disturbed about their bedwetting. Be sure to talk with the parents on the first day to find out about the child's reaction. Be sensitive to the child, as he/she may be embarrassed. Be discrete and handle the situation with minimal fuss and involvement of other campers. Bedwetting can also be associated with high blood sugars. Be sure to document bedwetting on the Camper Record and Cabin Daily Record, and discuss with Medical Staff as needed.

**Homesickness:** Many campers are homesick the first few days of camp. They may be withdrawn, cry easily, get into fights, etc. Keep them as busy as possible. It is important for parents and staff to recognize that children who have no experience with separation often need help to cope with the feelings of being alone and away from the safe haven of home. Homesickness may simply reflect the family's closeness. Explain in terms the child can understand that many children are homesick when away from home, that there is no cure, only distraction, and that telephone calls only make it worse. This must be combined with firm encouragement to participate in activities. Unless homesickness is treated compassionately but firmly, camp morale is imperiled and the resultant depression is reflected in difficulties with diabetes control. Homesickness that does not respond to these techniques should be brought to the attention of the camp staff. Psychology staff is available to help with your homesick campers.



# Biohazards and Universal Precautions

**Consider all blood and body fluids as potentially infectious.**

**Handwashing** is the best defense against infection.

- Wash hands or use hand sanitizer after blood glucose testing or urine ketone testing.

**Wear gloves to prevent exposure**

- when handling blood or urine, or any body fluids or secretions (i.e. when performing blood glucose testing or urine ketone testing)
- to clean blood off the surface of a glucometer)

**Sharps Disposal**

- Do NOT recap syringes or pen needles
- Dispose of used sharps immediately
- Change sharps containers when  $\frac{3}{4}$  full
- Syringes and pen needles must go in a plastic sharps box.

**Biohazard Disposal**

- Single-use lancets or retractable sharps may be placed either in a sharps box or in a red biohazard bag.
- Dispose of used gloves, ketone strips, blood-stained tissues or cotton balls, or used glucose test strips in a red biohazard bag.

Do NOT store food, eat, drink, apply cosmetics or lip balm, or handle contact lenses in areas where blood and/or body fluids may be present (e.g. in the area of the cabin where blood sugar testing is performed).