

And now, in the last part of the lesson on Diabetes, we discuss how to care for diabetic patients. People with diabetes can run into trouble if their levels of blood sugar and insulin are out of balance. At times, you may need to take steps to correct what's going on and stop the symptoms, and save their life.

Diabetes | Patient Care

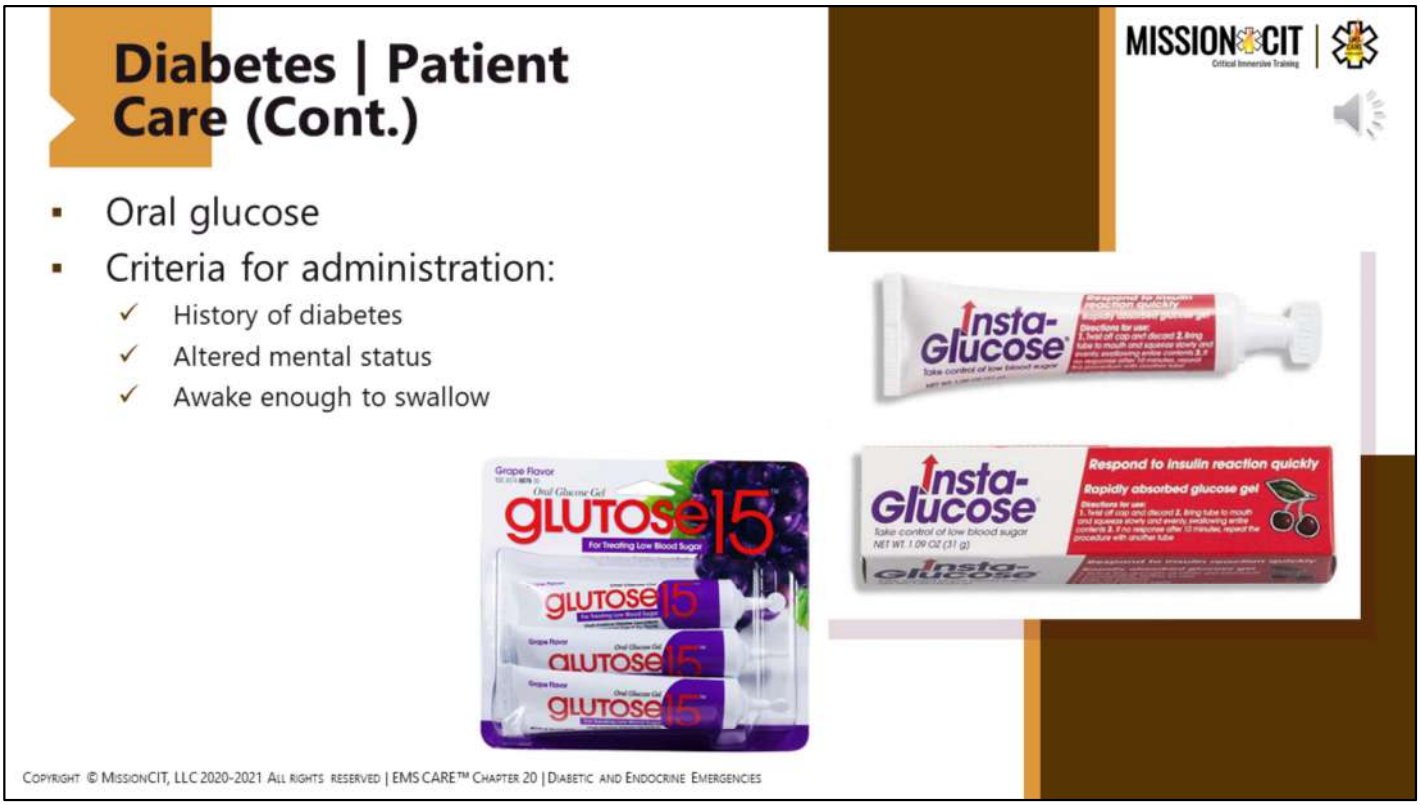
- Occasionally, one can treat person with mild hypoglycemia and minor altered mental status by simply giving something to eat
- Never administer food or liquids to patients at risk for aspiration



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Occasionally, one can treat a person with mild hypoglycemia, and minor altered mental status, by simply giving something to eat. Hence, a mild case of hypoglycemia, can be treated through eating, or drinking 15-20g of fast acting carbohydrate, such as glucose tablets, sweets, sugary drinks, or fruit juice.

However, never administer food or liquids to patients at risk for aspiration.

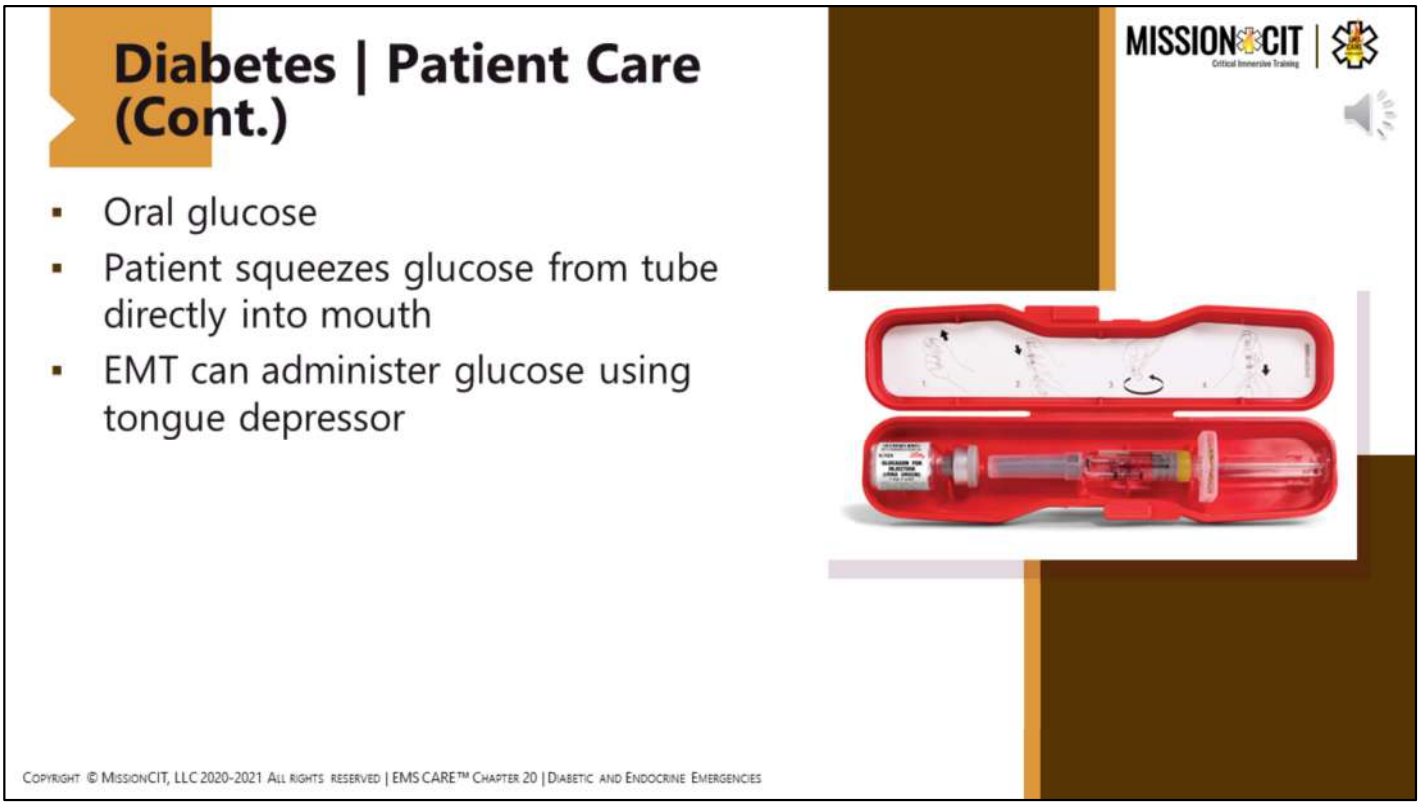


Hypoglycemic patients can be treated with oral glucose, if they are able to swallow safely.

The Criteria for administration are the following 3 items:

1. The Patient has a history of diabetes
2. You have assessed the presence of an Altered mental status
3. And yet, the patient is awake enough to swallow safely

Glucose, also known as dextrose is a simple sugar, that is used to increase the level of blood sugar when the level falls too low (hypoglycemia). Glucose in this form increases the level of blood sugar, so it is a glucose-elevating agent. Other glucose-elevating agents are diazoxide (Proglycem) and glucagon.

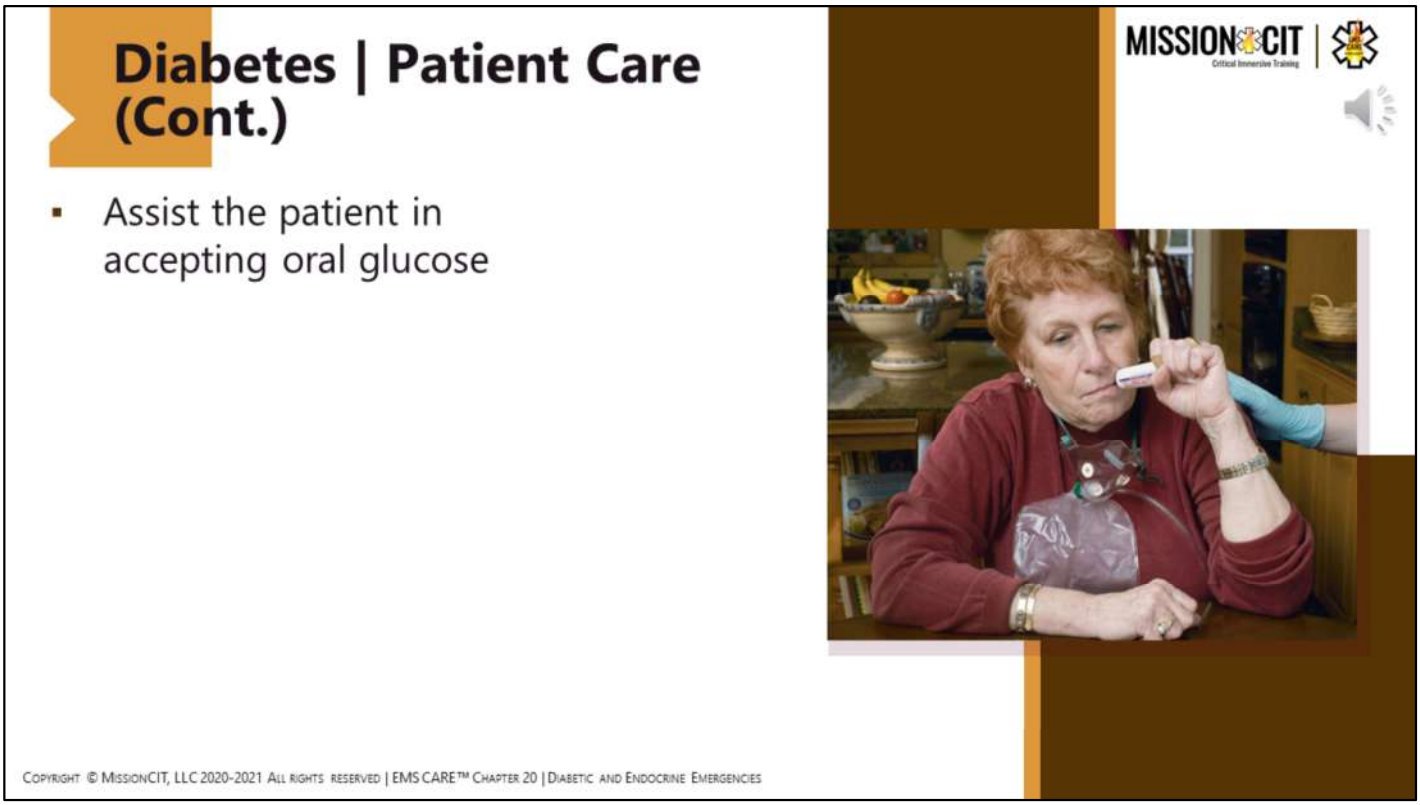


To administer oral glucose, break the seal on the tube and let the patient squeeze it into his mouth and swallow, or assist as needed. Be sure to document the medication given, the time it was given, the dose as noted on the tube, the route of administration and any effects, positive or negative.

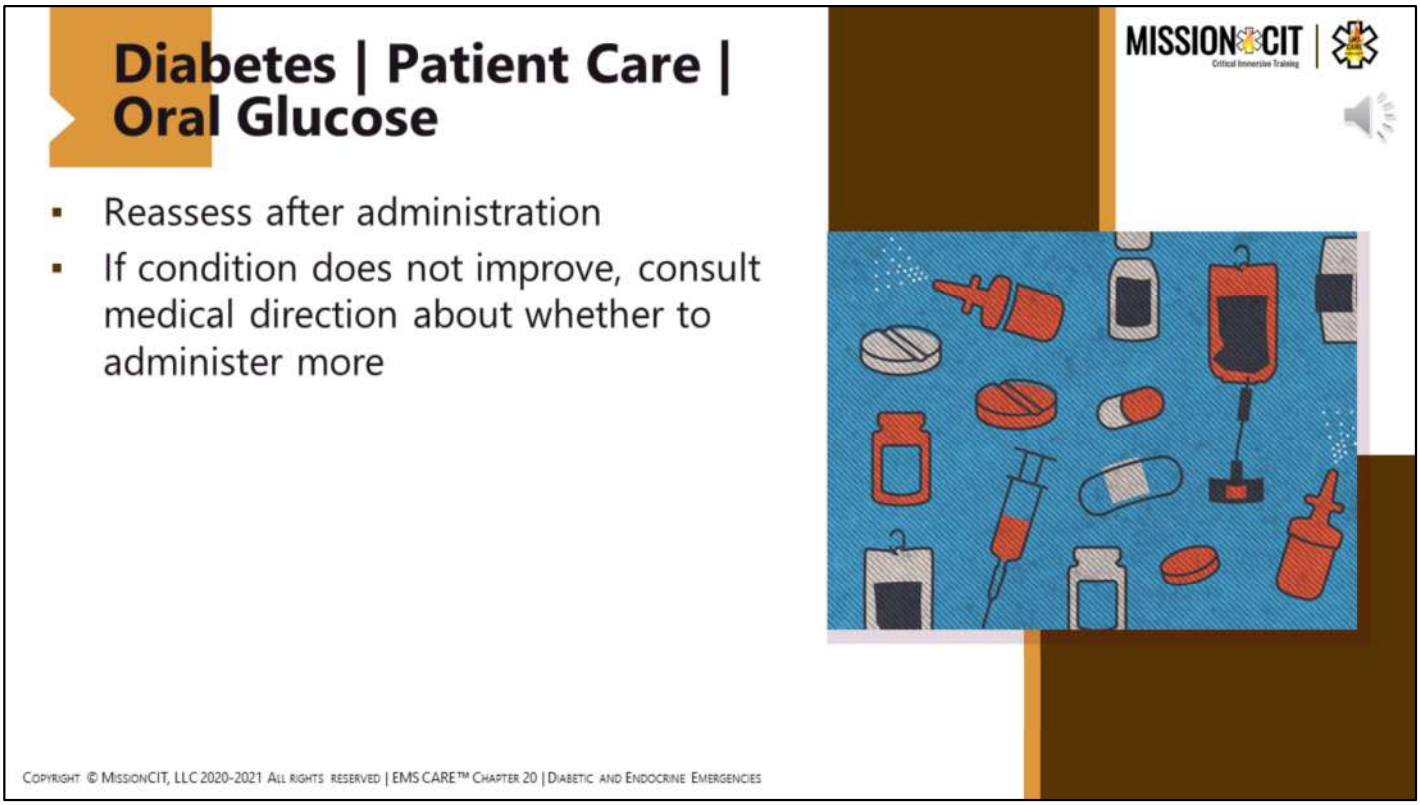
The usual dose of glucose for hypoglycemia is 10-20 gm orally or by intravenous infusion. The oral dose may be repeated in 10 minutes if hypoglycemic symptoms do not resolve. Oral glucose must be swallowed to be effective.

Hypoglycemia symptoms should improve in about 10 minutes after taking oral glucose.

The image shows an emergency dosage of glycogen which is an alternative to Oral Glucose. You must have the training and certification to administer. Follow your local protocol.



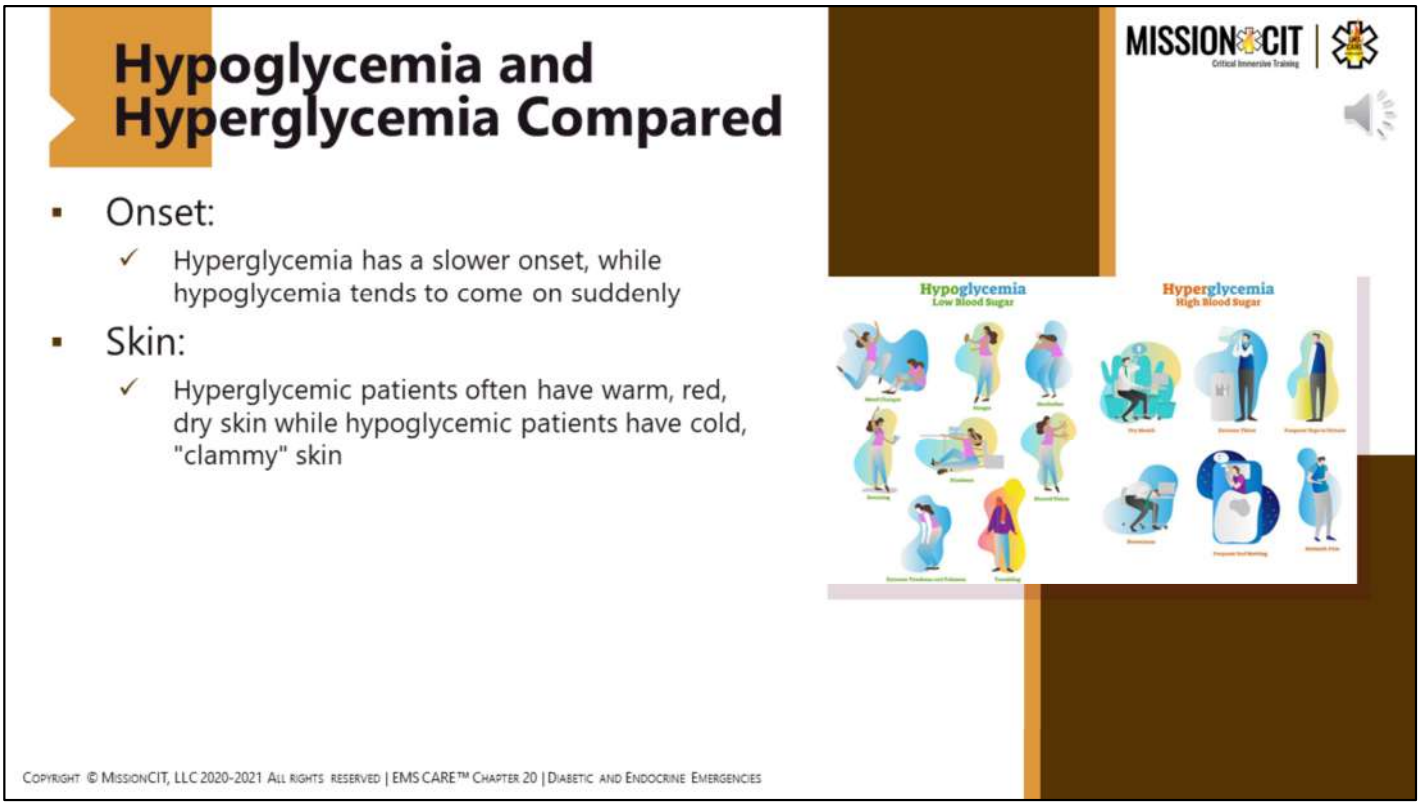
When you have the opportunity, be sure to taste some oral glucose, so you understand what your patients will have to endure. You will have the opportunity to practice the administration of oral glucose in your skills validation session.



As we discussed, the oral dose may be repeated in 10 minutes if hypoglycemic symptoms do not resolve. Oral glucose must be swallowed to be effective.

Hypoglycemia symptoms should improve in about 10 minutes after taking oral glucose.

If the patient's condition does not improve, consult with your medical direction team, about whether to administer more oral glucose.

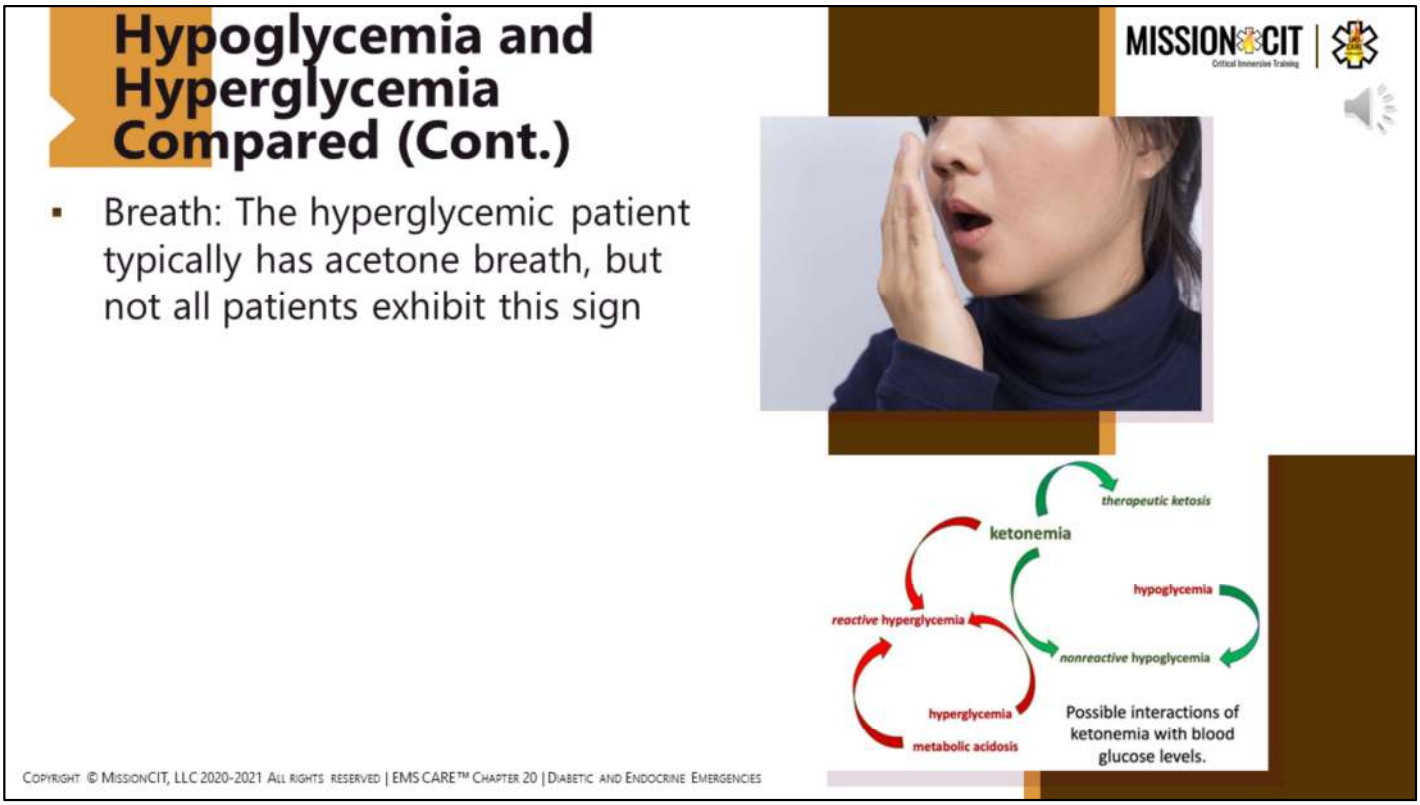


So, now we compare some telltale symptoms of Hypoglycemia, and Hyperglycemia.

- Hyperglycemia has a slower onset
- While hypoglycemia tends to come on suddenly

And…

- Hyperglycemic patients often have warm, red, dry skin
- While hypoglycemic patients have cold, "clammy" skin



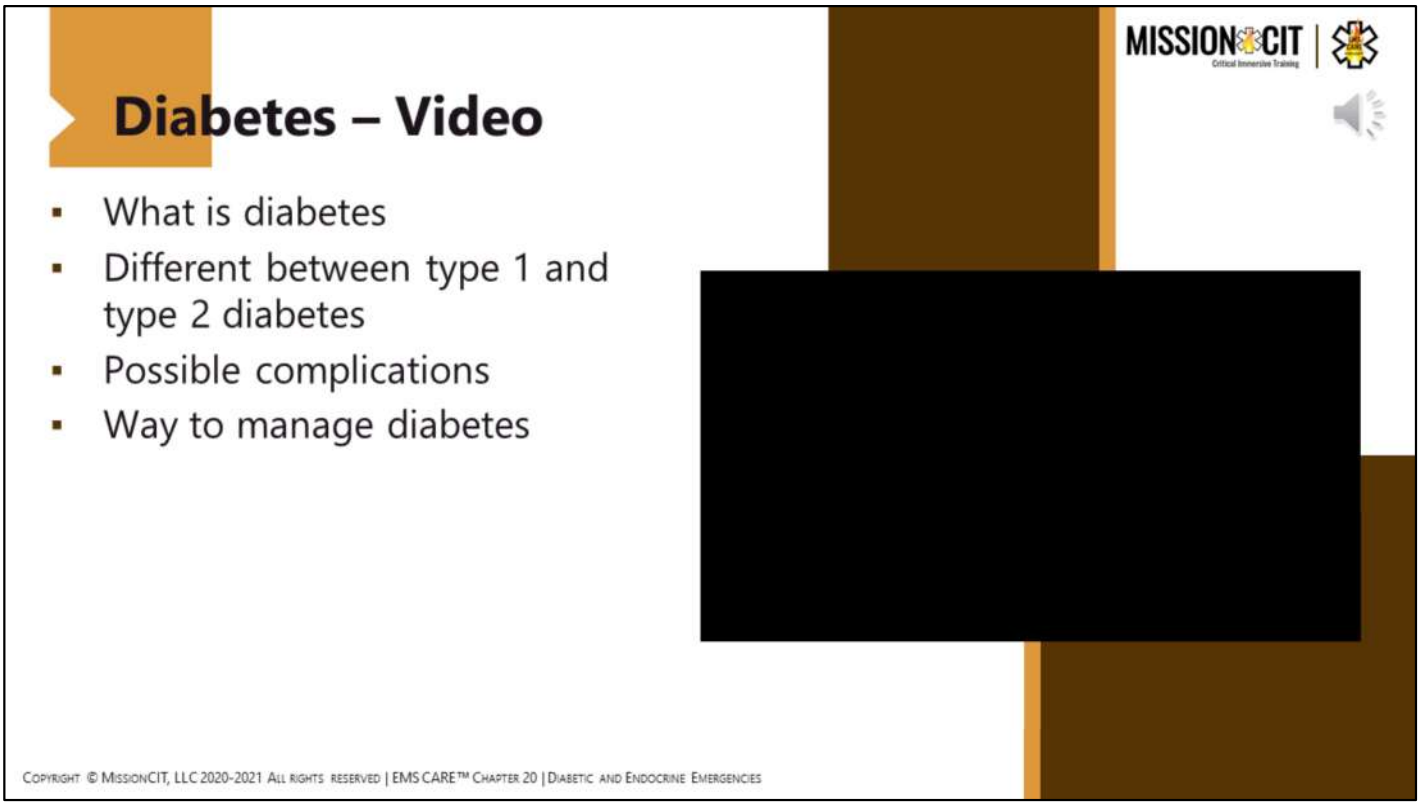
Interestingly, the hyperglycemic patient typically has acetone breath. But not all patients exhibit this sign.

Acetone is a ketone, that can cause a patient's breath to smell like nail polish. When ketones rise to unsafe levels, the patient is at risk of diabetic ketoacidosis (DKA). Symptoms of DKA include: a sweet and fruity odor on the patient's breath.

Diabetes may also raise glucose levels in the mouth, promoting bacteria growth, infection, and bad breath.

When the body can't make insulin, cells don't receive the glucose they need for fuel. To compensate, the body switches to plan B: burning fat. Burning fat instead of sugar produces ketones, which build up in your blood and urine. Ketones can also be produced when an individual is fasting or if on a high-protein, low-carbohydrate diet. Although not to the same level as they are in diabetic ketoacidosis.

So, the take-away, is that a patient's breath that smells of nail-polish, or has a sweet and fruity odor, may be the telltale sign of hyperglycemia.



We are now at the end of the lesson on Diabetes. Now watch a video on Diabetes from the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). It describes what diabetes is, the differences between type 1 and type 2 diabetes, possible complications, and ways to manage the disease.

Once the video is complete, Justin will be with you in the next lesson.

Good Studying.