

1. Background

Insulin storage options are needed to maintain insulin potency.

Most insulin is stable for 28-30 days at room temperature once opened. Exposing insulin to insufficient temperatures can cause insulin degradation in a very short time, with loss of glucose-lowering efficacy. This can lead to hyperglycaemia and hospitalizations due to DKA.

- TempraMed's VIVI Cap is a new solution that maintains insulin pens at room temperature 24/7/365 without any need for an energy source.
- VIVI Cap is the only scientifically validated, reusable insulin pen replacement cap that maintains insulin in the pen at proper "use" temperatures, preventing insulin degradation without any user intervention or batteries required.

2. The Problem

Insulin is a large peptide molecule with a narrow therapeutic window. Extreme high and low temperatures can cause insulin to break down and lose potency. This is especially problematic in the summer and winter months.



3. Current Solutions

Insulin is commonly stored in a cooler with ice pack, which makes it susceptible to freezing. There are new products that protect insulin and maintain it at room temperature.



User Preferences for Insulin Storage

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4. Survey Aims

To determine the reason why people with diabetes chose to purchase a new insulin storage device and what features they like most about the device.

5. Survey Method

This was a cross-sectional survey administered to people with diabetes that recently purchased the VIVI Cap. Participation in the survey was voluntary.

6. Survey Results

A total of 80 surveys were completed between February, 2021 and February, 2022. The average age of participants was between 40-60 years. Common themes of what people like most from the storage solution include: small size, convenience, ease of use, reassurance of insulin temperature, no battery needed, doesn't require refrigeration, and enhanced quality of life.



For what purpose did you initally purchase you VIVI Cap?

To use during sport or other outdoor activity - 6%

For every day use to keep my insulin safe - 54%

for people with diabetes.

VIVI Cap1 outperforms available solutions (oven temp 37.8°C/100°F)



Ease of use

Stabilizing insulin in high temperatures Keeps insulin safe Knowing my insulin wont get heated Self contained. No need for coolers or ice Keeping my insulin safe Simple and effective The safety of protected insulin! Very smart idea

7. Conclusions

Storage options are needed for insulin to maintain its temperature and potency. The VIVI Cap offers a solution to maintain insulin at room temperature. People with diabetes purchased for a wide variety of reasons ranging from everyday work to outdoor activities or trips. People like the convenience of use and small size and this offers another option

—— Pen in water evaporation device Pen in vivi Cap 1 15h from start 5h from start Time (hours)



- Being able to see that my sons insulin is at a safe temperature
- Gives me the flexibility to come and go without having to worry about my insulin going bad
- No worries about insulin being safe in hot Texas summers!
- Keeping my child's insulin safe in our hot climate
- Not having to worry about insulin in the hot summer months
- That I don't have to worry if my insulin is at a safe temperature
- Feeling that it's safe on really hot days when I'm away from home