# Hormonal Imbalance in Diabetics: Know Your Treatment Options

As you get older, the hormones begin to change in your body. If you have diabetes, this can potentially affect your blood sugar levels.

There are many changes that happen in your body as you get older, which may affect how active you are in your everyday life. With a lower level of activity, you are more likely to gain weight, which can affect your blood sugar levels. Your body also doesn't use insulin as efficiently as it did in your younger years.

You also start to produce fewer hormones as you age. This can cause a hormonal imbalance in both men and women. Men create less testosterone and women create less estrogen and progesterone. These changes can potentially spike your blood sugar.

If your blood sugar gets too out of control and you are unable to manage it, you may need to start hormone replacement therapy.

## Hormonal Imbalance Treatment

Patients with diabetes benefit from treating hormonal imbalance with insulin hormone therapy. For some, non-hormonal treatments like Metformin may fail to manage their blood sugar. Insulin therapy should be combined with dietary changes and a continual attempt at weight loss to bring blood sugar to a healthy level.

Maintaining healthy blood sugar levels is essential in preventing diabetes-related complications, like heart disease and neuropathy. Patients get the most benefit from insulin therapy when diagnosed early. It reduces the oxidative stress to the body and the toxic elements that affect your pancreas.

There are many hormonal therapies available as new, more effective ways of treating diabetes are discovered. One should choose a regimen based on individual needs, safety, effectiveness, and cost.

### Current insulin therapy options:

- **Insulin degludec**: An injection of an ultra-long-acting basal analog in multihexamer form. Typical use is once daily or three times a week. Known to reduce A1C with fewer side effects than similar insulin therapies.

- **Linjeta**: An injection of ultra-fast-acting human insulin. It has been shown to respond faster than similar insulin therapies. It also decreases oxidative stress and hypoglycemia and improves endothelial function.
- **Biosimilar insulins**: For example, lispro and glargine, may reduce the cost of insulin and increase accessibility once it demonstrates safety, tolerability, and efficacy.
- **Inhaled insulin**: Afrezza, currently approved by the FDA, is ultra-rapid-acting, inhalable insulin. Typically effective within 10-15 minutes.
- **GLP-1 analog**: An injection known to reduce fasting and after-meal blood sugar readings. It tends to be more effective when combined with oral medications or basal insulin.
    - Exenatide: This affects glucose-dependent insulin release, which suppresses appetite. This then slows down gastric emptying, leading to a reduction in glucagon secretions. The primary benefit is weight loss, which can help patients manage their diabetes.
    - Liraglutide: This is similar to exenatide. However, it only needs to be injected once a day.
- **Amylin analog**: This is a 37-amino-acid peptide located in the pancreatic beta cells. They are secreted along with insulin. When the insulin rises, so does the amylin. It is often deficient in those with diabetes and likely will need supplementation.
- **Pramlintide**: Mimics amylin analog and is similar to GLP-1 analog. It is an injection delivered before meals. It is most effective if used with bolus insulin.

Insulin therapy has proven to be the most effective hormonal treatment available for diabetes management. It is important to discuss all of your options with your healthcare provider to find the best treatment for you.

## [Client]

At the [client], we are dedicated to helping you find the right treatment to manage your diabetes. With our care, you can improve your quality of life. Our team of endocrinologists is here to help you take control of your diabetes. To learn more, visit us at [their website].