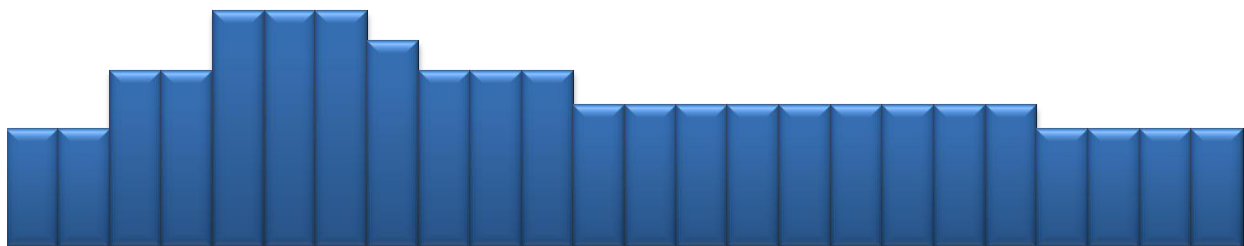


Insulin in Pumps: Precision Delivery

Insulin pumps are the Ferrari of insulin delivery . . . well at least for now . . . and they've come a LONG way since the early 1970s when the first insulin pumps became available. With the latest generation of "*smart pumps*" and the development of rapid acting insulin, the ability to fine tune insulin delivery is possible for the most technologically challenged, and tech savvy alike.

Insulin absorption with use of *long acting* insulin can vary a great deal, with as much as 30 to 50% variability from one day to the next . . . which means that the dosage of insulin you get one day may not be the same as the next, and your peak insulin absorption may not be the same today as it is tomorrow. Use of an insulin pump can decrease this variability to as little as 3%. This is possible because insulin pumps are able to deliver tiny bursts of *rapid acting* insulin, every 3 minutes, which can be matched to your bodies' natural circadian rhythm:

Basal Rate: *Units of insulin delivered per hour*



In addition, *smart pumps* take the guess work out of insulin dosage calculation. All you have to do is tell the pump your blood sugar number, and enter the number of Carbs that you eat. The pump calculates the rest!

Insulin pumps can be useful for all ages and sizes . . . from babies who are very sensitive and require tiny amounts of insulin, to adults who require large amounts of insulin due to insulin resistance. The use of concentrated insulin, called U500 because it has 5 times the strength of regular insulin, is also made possible with use of a pump.

There are of course many considerations before making a decision for use of an insulin pump, unique to every individual. They also require close attention to detail . . . But, if you are interested in precision delivery, flexibility, and high performance, an insulin pump may be right for you!

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