

Insulin Therapy

When GLP1 is not enough or not appropriate



Dr Hamish Russell

What if Jim ...

HbA1c 9.3%	Self - monitored blood glucose (mmol/L)						Before Bed	Overnight	Comments
	Breakfast		Lunch		Dinner				
	Before	After	Before	After	Before	After			
Day 1	6.7	7.8	7.0	8.9	7.5	13.6	11.2	<i>Mix Insulin 10 units at dinner?</i>	
Day 2	5.9	7.7	7.2	10.7	7.7	12.5	10.9		
Day 3	6.1	7.7	7.5	9.6	7.1	11.1	10.2		

Glucose Profile 2

HbA1c 8.3%	Self - monitored blood glucose (mmol/L)						Before Bed	Overnight	Comments
	Breakfast		Lunch		Dinner				
	Before	After	Before	After	Before	After			
Day 1	7.1	11.2	10.1	11.3	8.3	8.6	8.5		
Day 2	7.2	11.5	9.8	11.4	8.4	9.2	8.3		
Day 3	6.8	12.8	10.1	11.3	8.1	10.3	9.4		

**Mix Insulin
10 units at
breakfast?**

Profile 3

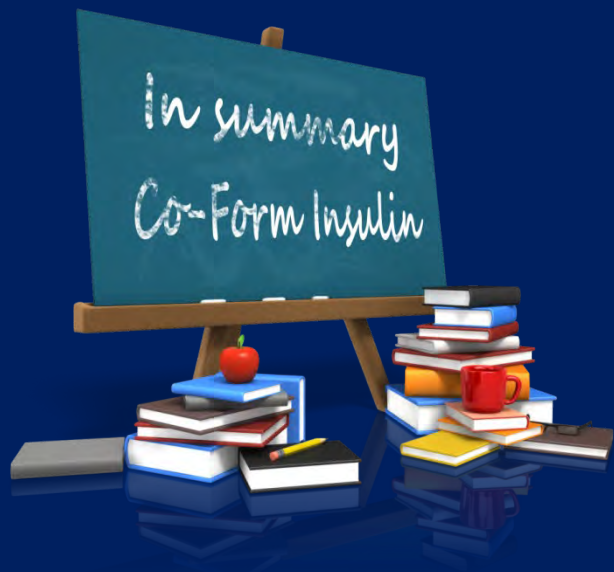
HbA1c 8.3%	Self - monitored blood glucose (mmol/L)						Before Bed	Overnight	Comments
	Breakfast		Lunch		Dinner				
	Before	After	Before	After	Before	After			
Day 1	7.8	10.2	7.6	9.7	7.3	12.3	9.3		
Day 2	8.2	10.5	7.2	9.1	6.3	12.5	10.1		
Day 3	8.7	10.8	7.4	8.3	7.0	10.5	9.9		

**Mix Insulin
10 units bd?**

Profile 4

HbA1c 8.3%	Self - monitored blood glucose (mmol/L)							Comments	
	Breakfast		Lunch		Dinner		Before Bed		Overnight
	Before	After	Before	After	Before	After			
Day 1	8.5	10.2	7.8	8.7	7.8	10.3	9.6		
Day 2	7.8	9.5	8.2	9.5	8.9	10.6	9.2		
Day 3	8.4	10.1	8.4	10.1	8.2	9.5	7.9		

HbA1c 10.6%	Self - monitored blood glucose (mmol/L)						Before Bed	Overnight	Comments
	Breakfast		Lunch		Dinner				
	Before	After	Before	After	Before	After			
Day 1	7.2	11.1	9.3	10.0	6.5	13.1	11.2		
Day 2	8.3	12.4	9.2	9.9	5.7	12.5	11.9		
Day 3	7.4	11.7	10.7	11.1	6.1	13.6	11.2		



- Mix insulins include premix as well as the newer Co-Formulation
- Mix insulins contain a basal and a prandial insulin
- Mix insulins are suitable in patients with a significant prandial glucose rise
- Mix insulins can be administered either as a once a day or twice a day injections depending on the glucose profile on SMBG

PBS Algorithm

Diet + Exercise + Metformin



Sulphonylureas (if appropriate)



Only *one* of the following

DPP4i

SGLT2i

GLP1-RA

TZD

INSULIN

ACARBOSE

Byetta ®

***Victoza**®

****Bydureon** ®