







## HbA1c conversion chart

%	Mmol/mol	%	Mmol/mol	%	Mmol/mol	%	Mmol/mol
5.0	31	7.3	56	9.6	81	11.9	107
5.1	32	7.4	57	9.7	83	12.0	108
5.2	33	7.5	58	9.8	84	12.1	109
5.3	34	7.6	60	9.9	85	12.2	110
5.4	36	7.7	61	10.0	86	12.3	111
5.5	37	7.8	62	10.1	87	12.4	112
5.6	38	7.9	63	10.2	88	12.5	113
5.7	39	8.0	64	10.3	89	12.6	114
5.8	40	8.1	65	10.4	90	12.7	115
5.9	41	8.2	66	10.5	91	12.8	116
6.0	42	8.3	67	10.6	92	12.9	117
6.1	43	8.4	68	10.7	93	13.0	119
6.2	44	8.5	69	10.8	95	13.1	120
6.3	45	8.6	70	10.9	96	13.2	121
6.4	46	8.7	72	11.0	97	13.3	122
6.5	48	8.8	73	11.1	98	13.4	123
6.6	49	8.9	74	11.2	99	13.5	124
6.7	50	9.0	75	11.3	100	13.6	125
6.8	51	9.1	76	11.4	101	13.7	126
6.9	52	9.2	77	11.5	102	13.8	127
7.0	53	9.3	78	11.6	103	13.9	128
7.1	54	9.4	79	11.7	104	14.0	130
7.2	55	9.5	80	11.8	105	14.1	131

-  Achieving tight glycaemic control. Rule out hypoglycaemia and discuss reduction of insulin or Sulphonylureas
-  Target range to aim for from diagnosis.  
Good target during pregnancy
-  Target to aim for when treated with two diabetes medications or not choosing such a strict target
-  Target to aim for when treated with three diabetes medications including injectable therapy or choosing a less strict target
-  May be an appropriate target range for people who are frail / elderly (including housebound, or living alone)
-  Look at agreeing a new, achievable HbA1c target. Remember the value of reducing an HbA1c by 11mmol/mol (1%)

## Comparison: HbA1c and blood glucose levels

HbA1c (mmol/mol)	Comparison blood glucose level (mmol/l)
35	4.7
42	6.3
53	8.2
64	10.0
75	11.9
86	13.7
97	15.6
108	17.4
119	19.3
130	21.1

Adapted from National Diabetes Education Program (USA). *Guiding principles for the care of people with or at risk for diabetes* 2014: p.31. [www.yourdiabetesinfo.org](http://www.yourdiabetesinfo.org)

## A guide to setting target fasting blood glucose ranges in line with individual HbA1c targets

Target HbA1c (mmol/mol)	Target fasting blood glucose range (also the pre-meal range) (mmol/l)
53	5.0 – 6.5
58	5.5 – 7.5
64	6.5 – 8.5
69	7.0 – 9.0
75	8.0 – 10.0
80	8.5 – 10.5
86	9.0 – 11.0

Refer to the PITstop HbA1c conversion chart

## An expert consensus group for diabetes and frailty

Category	HbA1c target	Fasting blood glucose target
Mild frailty	< 58mmol/mol (7.5%)	5.0 – 7.2mmol/l
Moderate frailty	58 – 64mol/mol (7.5 – 8%)	6.0 – 8.3mmol/l
Severe frailty	59 – 69mol/mol (8 – 8.5%)	7.0 – 10.0mmol/l

### Reference

Strain W.D et al. Diabetes and Frailty: an expert consensus statement on the management of older adults with type 2 diabetes, *Diabetes Therapy* (2021) 12:1227–1247