

Bolus Calculator

The chart below is a helpful tool to quickly work out what your bolus should be when you know how much carbohydrate you are going to have.

- Work out how much carbohydrate you are going to have.
- Read along the bottom (yellow) line to your ICR, then up the side (red) to the amount of carbohydrate you are going to have.
- Where the lines meet is the amount of insulin you should have in your bolus*.

200	40	25	20	16.5	13.5	10	8	6.5
190	38	24	19	16	12.5	9.5	7.5	6.5
180	36	22.5	18	15	12	9	7	6
170	34	21.5	17	14	11.5	8.5	7	5.5
160	32	20	16	13.5	10.5	8	6.5	5.5
150	30	19	15	12.5	10	7.5	6	5
140	28	17.5	14	11.5	9.5	7	5.5	4.5
130	26	16.5	13	11	8.5	6.5	5.2	4.5
120	24	15	12	10	8	6	5	4
110	22	14	11	9	7.5	5.5	4.5	3.5
100	20	12.5	10	8.5	6.5	5	4	3.5
95	19	12	9.5	8	6.5	5	4	3
90	18	11.5	9	7.5	6	4.5	3.5	3
85	17	10.5	8.5	7	5.5	4.5	3.5	3
80	16	10	8	6.5	5.5	4	3	2.5
75	15	9.5	7.5	6.5	5	4	3	2.5
70	14	9	7	6	4.5	3.5	3	2.5
65	13	8	6.5	5.5	4.5	3.5	2.5	2
60	12	7.5	6	5	4	3	2.5	2
55	11	7	5.5	4.5	3.5	3	2	2
50	10	6.5	5	4	3.5	2.5	2	1.5
45	9	5.5	4.5	4	3	2.5	2	1.5
40	8	5	4	3.5	2.5	2	1.5	1.5
35	7	4.5	3.5	3	2.5	2	1.5	1
30	6	4	3	2.5	2	1.5	1	1
25	5	3	2.5	2	1.5	1.5	1	1
20	4	2.5	2	1.5	1.5	1	1	0.5
15	3	2	1.5	1.5	1	1	0.5	0.5
10	2	1.5	1	1	0.5	0.5	0.5	0.5
0	1:5	1:8	1:10	1:12	1:15	1:20	1:25	1:30

Insulin to carbohydrate ratio (ICR)
(units of insulin:grams carbohydrate)

*Bolus units are rounded to the nearest 0.5 unit.

For example

- You are going to have a bowl of bran flakes. You have calculated that this has 30g of carbohydrate.
- Your ICR is 1:10.
- Read along the bottom (yellow) to 1:10 and up the side (red) to 30.
- Where the lines meet is the amount of bolus insulin you should have – 3 units*.

200	40	25	20	16.5	13.5	10	8	6.5
190	38	24	19	16	12.5	9.5	7.5	6.5
180	36	22.5	18	15	12	9	7	6
170	34	21.5	17	14	11.5	8.5	7	5.5
160	32	20	16	13.5	10.5	8	6.5	5.5
150	30	19	15	12.5	10	7.5	6	5
140	28	17.5	14	11.5	9.5	7	5.5	4.5
130	26	16.5	13	11	8.5	6.5	5.2	4.5
120	24	15	12	10	8	6	5	4
110	22	14	11	9	7.5	5.5	4.5	3.5
100	20	12.5	10	8.5	6.5	5	4	3.5
95	19	12	9.5	8	6.5	5	4	3
90	18	11.5	9	7.5	6	4.5	3.5	3
85	17	10.5	8.5	7	5.5	4.5	3.5	3
80	16	10	8	6.5	5.5	4	3	2.5
75	15	9.5	7.5	6.5	5	4	3	2.5
70	14	9	7	6	4.5	3.5	3	2.5
65	13	8	6.5	5.5	4.5	3.5	2.5	2
60	12	7.5	6	5	4	3	2.5	2
55	11	7	5.5	4.5	3.5	3	2	2
50	10	6.5	5	4	3.5	2.5	2	1.5
45	9	5.5	4.5	4	3	2.5	2	1.5
40	8	5	4	3.5	2.5	2	1.5	1.5
35	7	4.5	3.5	3	2.5	2	1.5	1
30	6	4	3	2.5	2	1.5	1	1
25	5	3	2.5	2	1.5	1.5	1	1
20	4	2.5	2	1.5	1.5	1	1	0.5
15	3	2	1.5	1.5	1	1	0.5	0.5
10	2	1.5	1	1	0.5	0.5	0.5	0.5
0	1:5	1:8	1:10	1:12	1:15	1:20	1:25	1:30

Insulin to carbohydrate ratio (ICR)
(units of insulin:grams carbohydrate)

*Bolus units are rounded to the nearest 0.5 unit.

Remember:

- Your ICR is your insulin to carbohydrate ratio.
- Use your ICR to calculate how much bolus you need with your meals and snacks.
- The bolus calculator can help you to quickly check what bolus you need.

This information was produced for Nutrition and Diet Resources UK (NDR-UK) with the kind support of dietitians and related health and care professionals. At the time of publication the information contained within the resource was, to the best of our knowledge, correct and up-to-date. Always consult a suitably qualified dietitian and/or your GP on health problems. NDR-UK cannot be held responsible for how clients/patients interpret and use the information within this resource. Visit www.ndr-uk.org for more information and to contact the team on the development and evidence supporting this resource.