

TABLE 1 International table of glycemic index (GI) and glycemic load (GL) values: 2002¹

Food number and item	GI ² (Glucose = 100)	GI ² (Bread = 100)	Subjects (Type and number)	Reference food and time period	Reference	Serving size <i>g</i>	Available carbohydrate <i>g/serving</i>	GL ³ (per serving)
BAKERY PRODUCTS								
Cakes								
1 Angel food cake (Loblaws's, Toronto, Canada)	67	95 ± 7	Type 1 and 2, 9	White bread, 3 h	1	50	29	19
2 Banana cake, made with sugar	47 ± 8	67	Healthy, 8	White bread, 2 h	2	80	38	18
3 Banana cake, made without sugar	55 ± 10	79	Healthy, 7	White bread, 2 h	2	80	29	16
4 Chocolate cake made from packet mix (Betty Crocker; General Mills Inc, Minneapolis, MN, USA)	38 ± 3	54	Healthy, 10	Glucose, 2 h	UO ⁴	111	52	20
5 Cupcake, strawberry-iced (Squiggles; Farmland, Grocery Holdings, Tooronga, Australia)	73 ± 12	104	Healthy, 10	Glucose, 2 h	UO ⁴	38	26	19
6 Lamingtons (sponge dipped in chocolate and coconut) (Farmland, Australia)	87 ± 17	124	Healthy, 10	Glucose, 2 h	UO ⁴	50	29	25
7 Pound cake (Sara Lee Canada, Bramalea, Canada)	54	77 ± 8	Type 1 and 2, 10	White bread, 3 h	1	53	28	15

8 Sponge cake, plain	46 ± 6	66	Healthy, 5	Glucose, 2 h	3 63	36	17
9 Vanilla cake made from packet mix with vanilla frosting (Betty Crocker, USA)	42 ± 4	60	Healthy, 10	Glucose, 2 h	UO ⁴ 111	58	24
10 Croissant (Food City, Toronto, Canada)	67	96 ± 6	Type 1 and 2, 13	White bread, 3 h	1 57	26	17
11 Crumpet (Dempster's Corporate Foods Ltd, Etobicoke, Canada)	69	98 ± 4	Type 1 and 2, 13	White bread, 3 h	1 50	19	13
12 Doughnut, cake type (Loblaw's, Canada)	76	108 ± 10	Type 1 and 2, 10	White bread, 3 h	1 47	23	17
13 Flan cake (Weston's Bakery, Toronto, Canada)	65	93 ± 6	Type 1 and 2, 10	White bread, 3 h	1 70	48	31
14 Muffins							
Apple, made with sugar ⁵	44 ± 6	63	Healthy, 8	White bread, 2 h	2 60	29	13
Apple, made without sugar ⁵	48 ± 10	69	Healthy, 8	White bread, 2 h	2 60	19	9
Apple, oat, and sultana, made from packet mix (Defiance Milling Co, Acacia Ridge, Australia)	54 ± 4	78 ± 6	Healthy, 9	White bread, 2 h	UO ⁴ 50	26	14
Apricot, coconut, and honey, made from packet mix (Defiance Milling Co, Australia)	60 ± 4	86 ± 6	Healthy, 9	White bread, 2 h	UO ⁴ 50	26	16
Banana, oat and honey, made from packet mix (Defiance Milling Co, Australia)	65 ± 11	93 ± 16	Healthy, 10	White bread, 2 h	UO ⁴ 50	26	17

Bran (Grandma Martin's Muffins; Culinar Inc, Aurora, Canada)	60	85 ± 8	Type 1 and 2, 14	White bread, 2 h	1 57	24	15
Blueberry (Culinar Inc, Canada)	59	84 ± 8	Type 1 and 2, 10	White bread, 3 h	1 57	29	17
Carrot (Culinar Inc, Canada)	62	88 ± 12	Type 1 and 2, 11	White bread, 3 h	1 57	32	20
Chocolate butterscotch, made from packet mix (Defiance Milling Co, Australia)	53 ± 5	75 ± 7	Healthy, 10	White bread, 2 h	UO ⁴ 50	28	15
Corn muffin, low-amylose	102	146	Type 2, 9	Glucose, 3 h ⁶	4 57	29	30
Corn muffin, high-amylose	49	70	Type 2, 9	Glucose, 3 h ⁶	4		
Oatmeal, made from mix (Quaker Oats Co of Canada, Peterborough, Canada)	69	98 ± 15	Type 1 and 2, 9	White bread, 3 h	1 50	35	24
15 Pancakes, prepared from shake mix (Green's General Foods, Glendenning, Australia)	67 ± 5	96	Healthy, 10	Glucose, 2 h	UO ⁴ 80	58	39
16 Pancakes, buckwheat, gluten-free, made from packet mix (Orgran Natural Foods, Carrum Downs, Australia)	102 ± 11	146	Healthy, 10	Glucose, 2 h	UO ⁴ 77	22	22
17 Pastry	59 ± 6	84	Healthy, 5	Glucose, 2 h	3 57	26	15
18 Pikelets (Golden brand; Tip Top Bakeries, Chatswood, Australia)	85 ± 14	121	Healthy, 10	Glucose, 2 h	UO ⁴ 40	21	18

19 Scones, plain, made from packet mix (Defiance Milling Co, Australia)	92 ± 8	131	Healthy, 10	Glucose, 2 h	UO ⁴ 25	9	7
20 Waffles (Aunt Jemima; Quaker Oats Co of Canada)	76	109 ± 6	Type 1 and 2, 10	White bread, 3 h	1 35	13	10

BEVERAGES

21 Coca Cola							
Coca Cola, soft drink (Coca Cola Amatil, Sydney, Australia)	53 ± 7	76	Healthy, 10	Bread, 2 h	UO ⁴ 250 mL	26	14
Coca Cola, soft drink (Atlanta, GA, USA)	63	90	Healthy, 10	Bread, 2 h	5 250 mL	26	16
Mean of 2 types	58 ± 5	83 ± 7					
22 Cordial, orange, reconstituted (Berri Ltd, Berri, Australia)							
	66 ± 8	94	Healthy, 8	Bread, 2 h	2 250 mL	20	13
23 Fanta, orange soft drink (Coca Cola Amatil, Australia)							
	68 ± 6	97	Healthy, 7	Bread, 2 h	2 250 mL	34	23
24 Lucozade, original (sparkling glucose drink) (Glaxo Wellcome Ltd, Uxbridge, UK)							
	95 ± 10	136	Healthy, 5	Glucose, 2 h	3 250 mL	42	40
25 Smoothie, raspberry (Con Agra Inc, Omaha, NE, USA)							
	33 ± 9	48 ± 13	Healthy, 10	Bread, 2 h	UO ⁴ 250 mL	41	14
26 Smoothie drink, soy, banana (So Natural Foods, Tarren Point, Australia) ⁶							
	30 ± 3	43	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	22	7
27 Smoothie drink, soy, chocolate hazelnut (So Natural Foods, Australia) ⁶							
	34 ± 3	49	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	25	8

28 Solo, lemon squash, soft drink (Cadbury Schweppes, Sydney, Australia) ⁶	58 ± 5	83	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	29	17
29 Up and Go, cocoa malt flavor (soy milk, rice cereal liquid breakfast) (Sanitarium Health Foods, Berkeley Vale, Australia) ⁶	43 ± 5	61	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	26	11
30 Up and Go, original malt flavor (soy milk, rice cereal liquid breakfast) (Sanitarium Health Foods, Australia) ⁶	46 ± 5	66	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	24	11
31 Xpress, chocolate (soy bean, cereal and legume extract drink with fructose) (So Natural Foods, Australia) ⁶	39 ± 2	56	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	34	13

Juices

32 Apple juice							
Apple juice, pure, unsweetened, reconstituted (Berri Ltd, Berri, Australia)	39 ± 5	55 ± 7	Healthy, 10	Bread, 2 h	UO ⁴ —	—	—
Apple juice, unsweetened	40	57	Type 2, 7	Glucose, 5 h ⁶	6 —	—	—
Apple juice, unsweetened (Allens, Toronto, Canada)	41	59 ± 8	Type 2, 6	Bread, 3 h	7 —	—	—
Mean of 3 studies	40 ± 1	57 ± 1	—	—	— 250 mL	29	12

33 Apple juice, pure, clear, unsweetened (Wild About Fruit, Wandin, Australia)	44 ± 2	63	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	30	13
34 Apple juice, pure, cloudy, unsweetened (Wild About Fruit, Australia)	37 ± 3	53	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	28	10
35 Apple and cherry juice, pure, unsweetened (Wild About Fruit, Australia)	43 ± 3	61	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	33	14
36 Carrot juice, freshly made (Sydney, Australia) ⁶	43 ± 3	61	Healthy, 9	Glucose, 2 h	UO ⁴ 250 mL	23	10
37 Cranberry juice cocktail (Ocean Spray, Melbourne, Australia)	52 ± 3	74	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	31	16
38 Cranberry juice cocktail (Ocean Spray Inc, Lakeville-Middleboro, MA, USA)	68 ± 3	97	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	36	24
39 Cranberry juice drink, Ocean Spray (Gerber Ltd, Bridgewater, UK)	56 ± 4	80	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	29	16
40 Grapefruit juice, unsweetened (Sunpac, Toronto, Canada)	48	69 ± 5	Type 2, 13	Bread, 3 h	7 250 mL	22	11
41 Orange juice							
Orange juice (Canada)	46 ± 6	66	Healthy, 6	Glucose, 2 h	3 —	—	—
Orange juice, unsweetened, reconstituted (Quelch; Berri Ltd, Carlton, Australia)	53 ± 6	76	Healthy, 8	Bread, 2 h	2 —	—	—
Mean of 2 studies	50 ± 4	71 ± 5	—	—	— 250 mL	26	13

42 Pineapple juice, unsweetened (Dole Packaged Foods, Toronto, Canada)	46	66 ± 3	Type 2, 13	Bread, 3 h	7 250 mL	34	16
43 Tomato juice, canned, no added sugar (Berri Ltd, Berri, Australia) ⁶	38 ± 4	54	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	9	4
44 Yakult, fermented milk drink with <i>Lactobacillus casei</i> (Yakult, Dandenong, Australia)	46 ± 6	66	Healthy, 7–10	Bread, 2 h	8 65 mL	12	6
Sports drinks							
45 Gatorade (Spring Valley Beverages Pty Ltd, Cheltenham, Australia)	78 ± 13	111	Healthy, 7–10	Bread, 2 h	8 250 mL	15	12
46 Isostar (Novartis Consumer Health, Nyon, Switzerland Australia)	70 ± 15	100	Healthy, 7–10	Bread, 2 h	8 250 mL	18	13
47 Sports Plus (Berri Ltd, Australia)	74 ± 6	106	Healthy, 7–10	Bread, 2 h	8 250 mL	17	13
48 Sustagen Sport (Mead Johnson, Rydalmere, Australia)	43 ± 9	61	Healthy, 7–10	Bread, 2 h	8 250 mL	49	21
Drinks made from drinking mix powders							
49 Build-Up nutrient-fortified drink, vanilla Rydalmere, Australia)	41 ± 4	59	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	33	14
50 Complete Hot Chocolate mix made with Rydalmere, Australia)	51 ± 3	73	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	23	11

51 Hi-Pro energy drink mix, vanilla, containing soy protein and whey powder (Harrod foods, Sefton, Australia) mixed in reduced-fat (1.5%) cow milk	36 ± 3	51	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	19	7
52 Malted milk powder in full-fat cow milk (Nestlé, Australia)	45 ± 3	64	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	26	12
53 Milo (chocolate nutrient-fortified drink powder)							
Milo (Nestlé, Australia) dissolved in water	55 ± 3	79 ± 4	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	16	9
Milo (Nestlé, Auckland, New Zealand) dissolved in water	52 ± 5	74 ± 7	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	16	9
Mean of 2 studies	54 ± 2	77 ± 3					
Milo (Nestlé, Australia) dissolved in full-fat cow milk	35 ± 2	50	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	25	9
Milo (Nestlé, New Zealand) dissolved in full-fat cow milk	36 ± 3	51	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	26	9
Mean of 2 studies	36 ± 1	51	—	—	— —	—	—
54 Nutrimeal, meal replacement drink, Dutch Chocolate (Usana, Salt Lake City, UT, USA)	26 ± 3	37	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	17	4
55 Quik (sweet drink powder)							
Quik, chocolate (Nestlé, Sydney, Australia), dissolved in water	53 ± 5	76 ± 8	Healthy, 9	Bread, 2 h	UO ⁴ 250 mL	7	4

Quik, chocolate (Nestlé, Australia), dissolved in 1.5%-fat milk	41 ± 4	59	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	11	5
Quik, strawberry (Nestlé, Australia), dissolved in water	64 ± 8	92 ± 12	Healthy, 9	Bread, 2 h	UO ⁴ 250 mL	8	5
Quik, strawberry (Nestlé, Australia), dissolved in 1.5%-fat milk	35 ± 3	50	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	12	4

BREADS

56 Bagel, white, frozen (Lender's Bakery, Montreal, Canada)	72	103 ± 5	Type 1 and 2, 13	Bread, 3 h	1 70	35	25
57 Baguette, white, plain (France)	95 ± 15	136	Type 2, 3	Glucose, 3 h	9 30	15	15
58 French baguette with chocolate spread (France)	72 ± 8	101	Healthy, 14	Glucose, 2 h	UO ⁷ 70	37	27
59 French baguette with butter and strawberry jam (France)	62 ± 7	89	Healthy, 14	Glucose, 2 h	UO ⁷ 70	41	26
60 Pain au lait (Pasquier, France)	63 ± 10	90	Healthy, 12	Glucose, 2 h	UO ⁷ 60	32	20
61 Bread stuffing, Paxo (Campbell Soup Co Ltd, Toronto, Canada)	74	106 ± 10	Type 1 and 2, 10	Bread, 3 h	1 30	21	16

Barley breads

62 Coarse barley kernel bread, 75–80% kernels							
75% kernels	27	39 ± 7	Type 2, 5	Bread, 3 h	10 30	20	5
80% scalded intact kernels (20% white-wheat flour)	34	48 ± 10	Healthy, 10	Bread, 1.5 h	11 30	20	7
80% intact kernels (20% white-wheat flour)	40	57 ± 10	Healthy, 10	Bread, 1.5 h	11 30	20	8

Whole-meal barley flour bread (used as reference for the 5 breads below) ⁸	70	100	Healthy, 11	Whole-meal barley bread, 2 h	15 30	20	14
Whole-meal barley flour bread with sourdough (lactic acid) ⁸	53	76	Healthy, 11	Whole-meal barley bread, 2 h	15 30	20	10
Whole-meal barley flour bread with lactic acid ⁸	66	94	Healthy, 11	Whole-meal barley bread, 2 h	15 30	19	12
Whole-meal barley flour bread with calcium lactate ⁸	59	84	Healthy, 11	Whole-meal barley bread, 2 h	15 30	20	12
Whole-meal barley flour bread with sodium propionate ⁸	65	93	Healthy, 11	Whole-meal barley bread, 2 h	15 30	20	13
Whole-meal barley flour bread with higher dose sodium propionate ⁸	57	82	Healthy, 11	Whole-meal barley bread, 2 h	15 30	19	11
Buckwheat bread							
67 Buckwheat bread, 50% dehusked buckwheat groats and 50% white-wheat flour (Sweden)	47	67 ± 10	Healthy, 10	Bread, 2 h	16 30	21	10
Fruit bread							
68 Bürgen fruit loaf (Tip Top Bakeries, Australia)	44 ± 5	63 ± 7	Healthy, 10	Bread, 2 h	17 30	13	6
69 Fruit and spice loaf, thick sliced (Buttercup Bakeries, Moorebank, Australia)	54 ± 6	77	Healthy, 10	Glucose, 2 h	UO ⁴ 30	15	8

70 Continental fruit loaf, wheat bread with dried fruit (Australia)	47 ± 6	67	Healthy, 8	Bread, 2 h	2 30	15	7
71 Happiness (cinnamon, raisin, and pecan annitowoc, WI, USA)	63 ± 5	89 ± 7	Healthy, 10	Bread, 2 h	UO ⁴ 30	14	9
72 Muesli bread, made from packet mix in bread making machine (Con Agra Inc, USA)	54 ± 6	77 ± 9	Healthy, 10	Bread, 2 h	UO ⁴ 30	12	7
73 Hamburger bun (Loblaw's, Canada)	61	87 ± 5	Type 1 and 2, 12	Bread, 3 h	1 30	15	9
74 Kaiser rolls (Loblaw's, Canada)	73	104 ± 5	Type 1 and 2, 12	Bread, 3 h	1 30	16	12
75 Melba toast, Old London (Best Foods Canada Inc, Etobicoke, Canada)	70	100 ± 6	Type 1 and 2, 11	Bread, 3 h	1 30	23	16
Gluten-free bread							
76 Gluten-free multigrain bread (Country Life Bakeries, Dandenong, Australia)	79 ± 13	113	Healthy, 10	Glucose, 2 h	UO ⁴ 30	13	10
77 Gluten-free white bread (gluten-free wheat starch) (UK)							
Unsliced	71	101 ± 22	Type 2, 11	White bread, 3 h	18 30	15	11
Sliced	80	114 ± 21	Type 2, 12	White bread, 3 h	18 30	15	12
Mean of 2 studies	76 ± 5	108 ± 7	—	—	— 30	15	11
78 Gluten-free fiber-enriched							

Un sliced (gluten-free wheat starch, soya bran) (UK)	69	99 ± 12	Type 2, 12	White bread, 3 h	18 30	13	9
Sliced (gluten-free wheat starch, soya bran) (UK)	76	109 ± 13	Type 2, 12	White bread, 3 h	18 30	13	10
Mean of 2 studies	73 ± 4	104 ± 5	—	—	— 30	13	9

Oat bread

79 Coarse oat-kernel bread, 80% intact oat kernels and 20% white-wheat flour (Sweden)	65	93 ± 11	Healthy, 10	Bread, 2 h	11 30	19	12
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Oat-bran bread

80 50% Oat bran (Australia)	44	63 ± 10	Healthy, 8	Bread, 2 h	12 30	18	8
81 45% Oat bran and 50% wheat flour (Sweden)	50	72 ± 10	Healthy, 10	Bread, 1.5 h	19 30	18	9
Mean of 2 studies	47 ± 3	68 ± 5	—	—	— 30	18	9

Rice bread

82 Rice bread, low-amylose Calrose rice (Pav's Allergy Bakery, Ingleburn, Australia)	72 ± 9	103 ± 10	Healthy, 12	Bread, 2 h	8 30	12	8
83 Rice bread, high-amylose Doongara rice (Pav's Allergy Bakery, Australia)	61 ± 9	88 ± 13	Healthy, 12	Bread, 2 h	8 30	12	7

Rye bread

84 Rye-kernel (pumpernickel) bread

Coarse rye-kernel bread, 80% intact kernels and 20% white-wheat flour (Sweden)	41	58 ± 8	Healthy, 10	Bread, 2 h	11	30	12	5
Rye-kernel bread, pumpernickel (Canada)	41	58	Diabetic, number NS	Glucose, time NS	20	30	12	5
Whole-grain pumpernickel (Holtzheuser Brothers Ltd, Toronto, Canada)	46	66 ± 7	Type 1 and 2, 9	Bread, 3 h	1	30	11	5
Rye-kernel bread, pumpernickel (80% kernels) (Canada)	55	78 ± 3	Type 1 and 2, 14	Bread, 3 h	21	30	12	7
Cocktail, sliced (Kasselar Food Products, Toronto, Canada)	55	79 ± 3	Type 2, 9	Bread, 3 h	22	30	12	7
Cocktail, sliced (Kasselar Food Products, Canada)	62	88 ± 13	Type 1, 6	Bread, 3 h	22	30	12	8
Mean of 6 studies	50 ± 4	71 ± 7	—	—	—	30	12	6
85 Whole-meal rye bread								
Whole-meal rye bread (Canada)	41	58	Type 2, number NS	Glucose, time NS	23	—	—	—
Whole-meal rye bread (Canada)	62	89 ± 6	Type 1 and 2, 14	Bread, 3 h	21	—	—	—
Whole-meal rye bread (Canada)	63	90 ± 7	Type 2, 9	Bread, 3 h	22	—	—	—
Whole-meal rye bread (Canada)	66	94 ± 10	Type 1, 6	Bread, 3 h	22	—	—	—
Mean of 4 studies	58 ± 6	83 ± 8	—	—	—	30	14	8

Specialty rye breads

86 Blackbread, Riga (Berzin's Specialty Bakery, Sydney, Australia)	76 ± 14	109	Healthy, 7	Glucose, 2 h	24	30	13	10
87 Bürgen Dark/Swiss rye								
Bürgen Dark/Swiss rye (Tip Top Bakeries, Australia)	55 ± 12	79	Healthy, 9	Glucose, 2 h	25	—	—	—
Bürgen Dark/Swiss rye (Tip Top Bakeries, Australia)	74 ± 6	106	Type 2, 14	Glucose, 2 h	25	—	—	—
Mean of 2 studies	65 ± 10	93 ± 14	—	—	—	30	10	7
88 Klosterbrot whole-meal rye bread (Dimpflmeier Bakery Ltd, Canada)								
	67	95 ± 6	Type 1 and 2, 10	Bread, 3 h	1	30	13	9
89 Light rye (Silverstein's Bakery, Toronto, Canada)								
	68	97 ± 6	Type 1 and 2, 12	Bread, 3 h	1	30	14	10
90 Linseed rye (Rudolph's Specialty Bakery Ltd, Canada)								
	55	78 ± 8	Type 1 and 2, 9	Bread, 3 h	1	30	13	7
91 Roggenbrot, Vogel's (Stevns and Co, Sydney, Australia)								
	59 ± 5	84	Healthy, 8	Bread, 2 h	13	30	14	8
92 Schinkenbrot, Riga (Berzin's Specialty Bakery, Sydney, Australia)								
	86 ± 15	123	Healthy, 7	Glucose, 2 h	24	30	14	12
93 Sourdough rye								
Sourdough rye (Canada)	57	83	Type 2, 13	Bread, 3 h	26	—	—	—
Sourdough rye (Australia)	48	69	Healthy, 10	Glucose, 2 h	UO ⁴	—	—	—
Mean of 2 studies	53 ± 5	76 ± 7	—	—	—	30	12	6

94 Volkornbrot, whole-meal rye bread (Dimpflmeier Bakery Ltd, Canada)	56	80 ± 5	Type 1 and 2, 10	Bread, 3 h	1 30	13	7
Wheat bread							
95 Coarse wheat-kernel bread, 80% intact kernels and 20% white-wheat flour (Sweden)	52	74 ± 7	Healthy, 10	Bread, 2 h	11 30	20	10
96 Cracked wheat kernel (bulgur) bread							
50% cracked wheat kernel (Canada)	58	83 ± 4	Type 2, 6	Bread, 3 h	10 30	20	12
75% cracked wheat kernels (Canada)	48	69 ± 4	Type 2, 6	Bread, 3 h	10 30	20	10
Mean of 2 studies	53 ± 3	76 ± 4	—	—	— 30	20	11
Spelt wheat bread							
97 White spelt wheat bread (Slovenia) ⁹	74	105	Healthy, 6	Bread, 3 h	27 30	23	17
98 Whole-meal spelt wheat bread (Slovenia) ⁹	63	91	Healthy, 6	Bread, 3 h	27 30	19	12
99 Scalded spelt wheat-kernel bread (Slovenia) ⁹	67	96	Healthy, 6	Bread, 3 h	27 30	22	15
100 Spelt multigrain bread (Pav's bakery, Australia)	54 ± 10	77 ± 14	Healthy, 12	Bread, 2 h	UO ⁴ 30	12	7
101 White-wheat-flour bread							
White flour (Canada)	69 ± 5	99	Healthy, 10	Glucose, 2 h	3 30	14	10

White flour (USA)	70	100	Type 2, 5; IGT, 6 ¹⁰	Bread, 3 h	28 30	14	10
White flour (Sunblest; Tip Top Bakeries, Australia)	70	100	Healthy, 10	Bread, 2 h	UO ⁴ 30	14	10
White flour (Dempster's Corporate Foods Ltd, Canada)	71	101 ± 9	Type 1 and 2, 12	Bread, 3 h	1 30	14	10
White flour (South Africa)	71 ± 7	101	Healthy, 7	Glucose, 2 h	29 30	13	9
White flour (Canada)	71	102 ± 5	Type 2, 6	Bread, 3 h	30 30	14	10
Mean of 6 studies	70 ± 0	101 ± 0	—	—	— 30	14	10
102 White-wheat-flour bread, hard, toasted (Italian)	73	104 ± 5	Type 2, 17	Glucose, 3 h	31 30	15	11
103 Wonder, enriched white bread (Interstate Brands Companies, Kansas City, MO, USA)							
Wonder, enriched white bread	71 ± 9	101 ± 13	Healthy, 10	Bread, 2 h	UO ⁴ —	—	—
Wonder, enriched white bread	72 ± 4	103	Healthy, 10	Glucose, 2 h	UO ⁴ —	—	—
Wonder, enriched white bread	77 ± 3	110	Healthy, 10	Glucose, 2 h	UO ⁴ —	—	—
Mean of 3 studies	73 ± 2	105 ± 3	—	—	— 30	14	10
104 White Turkish bread (Turkey)	87	124	Type 2, 52; healthy, 31	Glucose, 2 h	32 30	17	15
White bread with enzyme inhibitors							
105 White bread + acarbose (200 mg) (Mexico)							

White bread + acarbose (200 mg) (Mexico)	18	26 ± 13	Type 2, 12	Bread, 3 h	33 30	17	3
White bread + acarbose (200 mg) (Mexico)	50	70 ± 5	Healthy, 10	Bread, 3 h	33 30	17	8
Mean of 2 groups of subjects	34 ± 16	48 ± 22	—	—	— 30	17	6
106 White bread roll + 3 mg trestatin (pancreatic α -amylase inhibitor) (Switzerland) ⁷	48	69	Type 2, 6	Bread, 4 h ¹¹	34 30	12	6
107 White bread roll + 6 mg trestatin (Switzerland) ⁸	29	42	Type 2, 6	Bread, 4 h ¹¹	34 30	12	4
White bread with soluble fiber							
108 White bread + 15 g psyllium fiber (<i>Plantago psyllium</i>)							
White bread + 15 g psyllium fiber (<i>Plantago psyllium</i>) (Mexico)	41	59 ± 10	Type 2, 12	Bread, 3 h	33 30	17	7
White bread + 15 g psyllium fiber	65	93 ± 24	Healthy, 10	Bread, 3 h	33 30	17	11
Mean of 2 groups of subjects	53 ± 12	76 ± 17	—	—	— 30	17	9
109 White bread eaten with vinegar as vinaigrette (Sweden)	45	64	Healthy, 10	Bread, 1.6 h	35 30	15	7
110 White bread eaten with powdered dried seaweed <i>Nori alga</i> (Spain)	48	68	Healthy, 12	Bread, 2 h	36 30	15	7

111 White bread containing Eurylonhigh-amylose maize starch (France) ¹²	42	60 ± 6	Healthy, 8	Bread, 2.8 h ¹²	37 30	19	8
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White fiber-enriched bread

112 White, high-fiber (Dempster's Corporate)	67	96 ± 6	Type 1 and 2, 13	Bread, 3 h	1 —	—	—
113 White, high-fiber (Weston's Bakery, Toronto, Canada)	69	98 ± 5	Type 1 and 2, 12	Bread, 3 h	1 —	—	—
Mean of 2 studies	68 ± 1	97 ± 1	—	—	— 30	13	9

White resistant starch-enriched bread

114 Fibre white (Nature's Fresh, Auckland, New Zealand)	77 ± 10	110	Healthy, 14	Glucose, 2 h	25 30	15	11
115 Wonderwhite (Buttercup Bakeries, Australia)	80 ± 8	114	Healthy, 8	Bread, 2 h	13 30	14	11
116 Whole-meal (whole-wheat) wheat-flour bread							
Whole-meal flour (Canada)	52	74 ± 15	Type 2, 9	Bread, 3 h	38 30	12	6
Whole-meal flour (Canada)	64	92 ± 11	Type 2, 6	Bread, 3 h	10 30	12	8
Whole-meal flour (Canada)	65	93	Diabetic, number NS	Glucose, time NS	20 30	12	8
Whole-meal flour (Canada)	67	95 ± 7	Type 2, 11	Bread, 3 h	22 30	12	8
Whole-meal flour (Canada)	67	96 ± 5	Type 1 and 2, 14	Bread, 3 h	21 30	12	8

Whole-meal flour (Canada)	69	98 ± 5	Type 1, 5	Bread, 3 h	22	30	12	8
Whole-meal flour (Canada)	71	102 ± 6	Type 2, 6	Bread, 3 h	30	30	12	8
Whole-meal flour (Canada)	72 ± 6	103	Healthy, 10	Glucose, 2 h	3	30	12	8
Whole-meal flour (USA) ⁸	73	104	Type 2, 8	Glucose, 3 h	4	30	14	10
Whole-meal flour (South Africa)	75 ± 9	107	Healthy, 8	Glucose, 2 h	29	30	13	9
Whole-meal flour (Tip Top Bakeries, Australia)	77 ± 9	110	Healthy, 8	Glucose, 2 h	39	30	12	9
Whole-meal flour (Tip Top Bakeries, Australia)	78 ± 16	111	Healthy, 7	Glucose, 2 h	24	30	12	9
Whole-meal flour (Kenya)	87	124 ± 40	Type 2, 9	Bread, 2.5 h	40	30	13	11
Mean of 13 studies	71 ± 2	101 ± 3	—	—	—	30	13	9
117 Whole-meal Turkish bread	49	70	Type 2, 52; healthy, 31	Glucose, 2 h	32	30	16	8
Specialty wheat breads								
118 Bürgen Mixed-Grain bread (Australia)								
Bürgen Mixed-Grain (Tip Top Bakeries, Chatswood, Australia)	34 ± 4	49	Healthy, 10–12	Bread, 2 h	17	—	—	—
Bürgen Mixed-Grain	45 ± 12	64	Healthy, 10	Glucose, 2 h	25	—	—	—
Bürgen Mixed-Grain	69 ± 6	99	Type 2, 13	Glucose, 2 h	25	—	—	—
Mean of 3 studies	49 ± 10	71 ± 15	—	—	—	30	11	6

119 Bürgen Oat Bran and Honey Loaf with Barley (Tip Top Bakeries, Australia)	31 ± 3	44	Healthy, 8	Bread, 2 h	13	30	10	3
120 Bürgen Soy-Lin, kibbled soy (8%) and linseed (8%) loaf (Tip Top Bakeries, Australia)	36 ± 4	51	Healthy, 10–12	Bread, 2 h	17	30	9	3
121 English Muffin bread (Natural Ovens, USA)	77 ± 7	109 ± 11	Healthy, 10	Bread, 2 h	UO ⁴	30	14	11
122 Healthy Choice Hearty 7 Grain (Con Agra Inc, USA)	55 ± 6	79	Healthy, 10	Glucose, 2 h	UO ⁴	30	14	8
123 Healthy Choice Hearty 100% Whole Grain (Con Agra Inc, USA)	62 ± 6	89	Healthy, 10	Glucose, 2 h	UO ⁴	30	14	9
124 Helga's Classic Seed Loaf (Quality Bakers, Sydney, Australia)	68 ± 9	97	Healthy, 10	Glucose, 2 h	UO ⁴	30	14	9
125 Helga's traditional whole-meal bread (Quality Bakers, Australia)	70 ± 14	100	Healthy, 8	Glucose, 2 h	UO ⁴	30	13	9
126 Hunger Filler, whole-grain bread (Natural Ovens, USA)	59 ± 8	84 ± 12	Healthy, 10	Bread, 2 h	UO ⁴	30	13	7
127 Molenberg (Goodman Fielder, Auckland, New Zealand)								
Molenberg	75 ± 10	107	Healthy, 15	Glucose, 2 h	25	—	—	—
Molenberg	84 ± 8	120	Type 2, 14	Glucose, 2 h	25	—	—	—
Mean of 2 studies	80 ± 5	114 ± 7	—	—	—	30	14	11
128 9-Grain Multi-Grain (Tip Top Bakeries, Australia)	43 ± 5	61	Healthy, 10–12	Bread, 2 h	17	30	14	6

129 Multigrain loaf, spelt wheat flour (Australia)	54 ± 10	77	Healthy, 7–10	Bread, 2 h	8 30	15	8
130 Multigrain (50% kibbled wheat grain) (Australia)	43	61 ± 7	Healthy, 8	Bread, 2 h	12 30	14	6
131 Nutty Natural, whole-grain bread (Natural Ovens, USA)	59 ± 7	85 ± 11	Healthy, 10	Bread, 2 h	UO ⁴ 30	12	7
132 Performax (Country Life Bakeries, Dandenong, Australia)	38 ± 3	55 ± 4	Healthy, 10	Bread, 2 h	UO ⁴ 30	13	5
133 Ploughman's Whole-grain, original recipe (Quality Bakers, Australia)	47	67 ± 4	Healthy, 8	Bread, 2 h	12 30	14	7
134 Ploughman's Whole-meal, smooth milled (Quality Bakers, Australia)	64 ± 10	91	Healthy, 12	Bread, 2 h	UO ⁴ 30	13	9
135 Semolina bread (Kenya)	64	92 ± 7	Type 2, 10	Bread, 3 h	41 —	—	—
136 Sourdough wheat (Australia)	54	77	Healthy, 10	Glucose, 2 h	UO ⁴ 30	14	8
137 Soy and linseed bread (made from packet mix in bread maker) (Con Agra Inc, USA)	50 ± 6	71 ± 9	Healthy, 10	Bread, 2 h	UO ⁴ 30	10	5
138 Stay Trim, whole-grain bread (Natural Ovens, USA)	70 ± 10	101 ± 15	Healthy, 10	Bread, 2 h	UO ⁴ 30	15	10
139 Sunflower and barley bread, Riga brand (Berzin's Specialty Bakery, Australia)	57 ± 6	81	Healthy, 8	Bread, 2 h	13 30	13	7
140 Vogel's Honey and Oats (Stevns and Co, Australia)	55 ± 5	79	Healthy, 8	Bread, 2 h	13 30	14	7

141 Vogel's Roggenbrot (Stevns and Co, Australia)	59 ± 5	84	Healthy, 8	Bread, 2 h	13 30	14	8
142 Whole-wheat snack bread (Ryvita Co Ltd, Poole, Dorset, UK)	74	105 ± 8	Type 1 and 2, 11	Bread, 3 h	1 30	22	16
143 100% Whole-grain bread (Natural Ovens, USA)	51 ± 11	73 ± 15	Healthy, 10	Bread, 2 h	UO ⁴ 30	13	7
144 White-wheat-flour flatbread (Sweden)	79	113 ± 13	Healthy, 8	Bread, 2 h	14 30	16	13

Unleavened bread

145 Lebanese bread, white (Seda Bakery, Sydney, Australia)	75 ± 9	107	Healthy, 10	Glucose, 2 h	UO ⁴ 30	16	12
146 Middle Eastern flatbread	97 ± 29	139	Healthy, 12	Glucose, 2 h	42 30	16	15
147 Pita bread, white (Canada)	57	82 ± 10	Type 1 and 2, 7	Bread, 3 h	1 30	17	10
148 Wheat-flour flatbread (India)	66 ± 9	94	Type 2, 6	Glucose, 2 h	43 30	16	10
149 Amaranth:wheat (25:75) composite flour flatbread (India)	66 ± 10	94	Type 2, 6	Glucose, 2 h	43 30	15	10
150 Amaranth:wheat (50:50) composite flour flatbread (India)	76 ± 20	109	Type 2, 6	Glucose, 2 h	43 30	15	11

BREAKFAST CEREALS AND RELATED PRODUCTS

151 All-Bran (high-fiber, extruded wheat-bran cereal)							
All-Bran (Kellogg's, Pagewood, Australia) ¹³	30	43 ± 3	Healthy, 7	Bread, 3 h	44 30	15	4

All-Bran (Kellogg's, Battle Creek, MI, USA)	38	54	Healthy, 8	Glucose, 3 h ¹⁴	45	30	23	9
All-Bran (Kellogg's Inc, Etobicoke, Canada)	50	72 ± 5	Type 2, 6	Bread, 3 h	30	30	23	9
All-Bran (Kellogg's Inc, Canada)	51 ± 5	73	Healthy, 6	Glucose, 2 h	3	30	23	9
Mean of 4 studies	42 ± 5	60 ± 7	—	—	—	—	—	—
152 All-Bran Fruit 'n Oats (Kellogg's, Australia)	39	56	Healthy, 10–12	Bread, 2 h	17	30	17	7
153 All-Bran Soy 'n Fibre (Kellogg's, Australia)	33 ± 3	47 ± 4	Healthy, 10	Bread, 2 h	UO ⁴	30	14	4
154 Amaranth (<i>Amaranthus esculentum</i>) popped, eaten with milk and nonnutritive sweetener (India)	97 ± 19	139	Healthy, 6	Glucose, 3 h	43	30	19	18
Barley porridge								
155 Whole-meal barley flour porridge (100% regular barley) (flour:water, 1:3), boiled 2.5 min (Sweden)	68	97 ± 16	Healthy, 8	Bread, 2 h	14	50 (dry)	34	23
156 Whole-meal high-fiber barley flour porridge (50% regular barley flour: 50% high-fiber barley flour) (Sweden)	55	78 ± 8	Healthy, 8	Bread, 2 h	14	50 (dry)	15	8
157 Barley porridge made from steamed thin (0.5 mm) dehulled barley flakes (Sweden)	62	88 ± 6	Healthy, 10	Bread, 2 h	46	50 (dry)	28	17

Cornflakes (Kellogg's, Auckland, New Zealand)	72 ± 16	103	Healthy, 11	Glucose, 2 h	25 30	25	18
Cornflakes (Kellogg's, Australia)	77	110	Healthy, 6	Glucose, 2 h	47 30	25	20
Cornflakes (Kellogg's Inc, Canada)	80 ± 6	114	Healthy, 6	Glucose, 2 h	3 30	26	21
Cornflakes (Kellogg's Inc, Canada)	86	123 ± 5	Type 2, 7	Bread, 3 h	30 30	26	22
Cornflakes (Kellogg's, USA) ⁷	92	130	Type 2, 9	Glucose, 3 h	4 30	26	24
Mean of 5 studies	81 ± 3	116 ± 5	—	—	— 30	26	21
169 Cornflakes, high-fiber (Presidents Choice; Sunfresh Ltd, Toronto, Canada) ¹⁵	74	105 ± 6	Type 1 and 2, 9	Bread, 3 h	1 30	23	17
170 Cornflakes, Crunchy Nut (Kellogg's, Australia)	72 ± 4	103	Healthy, 10	Glucose, 2 h	UO ⁴ 30	24	17
171 Corn Pops (Kellogg's, Australia)	80 ± 4	114	Healthy, 10	Glucose, 2 h	UO ⁴ 30	26	21
172 Cream of Wheat (Nabisco Brands Ltd, Canada) ¹⁵	66	94 ± 4	Type 1 and 2, 9	Bread, 3 h	1 250	26	17
173 Cream of Wheat, Instant (Nabisco Brands Ltd, Canada) ¹⁵	74	105 ± 8	Type 1 and 2, 9	Bread, 3 h	1 250	30	22
174 Crispix (Kellogg's Inc, Canada) ¹⁵	87	124 ± 5	Type 1 and 2, 12	Bread, 3 h	1 30	25	22
175 Energy Mix (Quaker, France)	80 ± 7	112	Healthy, 14	Glucose, 2 h	UO ⁷ 30	24	19
176 Froot Loops (Kellogg's, Australia)	69 ± 9	98 ± 13	Healthy, 10	Bread, 2 h	UO ⁴ 30	26	18

177 Frosties, sugar-coated cornflakes (Kellogg's, Australia)	55	79	Healthy, 12	Bread, 2 h	UO ⁴	30	26	15
178 Fruitful Lite (Hubbards, New Zealand)	61 ± 20	86	Healthy, 9	Glucose, 2 h	25	30	20	12
179 Fruity-Bix, berry (Sanitarium, Auckland, New Zealand)	113 ± 10	161	Healthy, 10	Glucose, 2 h	25	30	22	25
180 Golden Grahams (General Mills Inc, Canada) ¹⁵	71	102 ± 12	Type 1 and 2, 9	Bread, 3 h	1	30	25	18
181 Golden Wheats (Kellogg's, Australia)	71 ± 8	101 ± 11	Healthy, 10	Bread, 2 h	UO ⁴	30	23	16
182 Grapenuts								
Grapenuts (Post, Kraft General Foods Inc, Toronto, Canada) ¹⁵	67	96 ± 9	Type 1 and 2, 11	Bread, 3 h	1	30	19	13
Grapenuts (Kraft Foods Inc, Port Chester, NY, USA)	75 ± 6	107 ± 8	Healthy, 10	Bread, 2 h	UO ⁴	30	22	16
Mean of 2 studies	71 ± 4	102 ± 6	—	—	—	30	21	15
183 Grapenuts Flakes (Post, Kraft General Foods Inc, Canada) ¹⁵	80	114 ± 8	Type 1 and 2, 10	Bread, 3 h	1	30	22	17
184 Guardian (Kellogg's, Australia)	37 ± 9	53	Healthy, 10–12	Bread, 2 h	17	30	12	5
185 Healthwise for bowel health (Uncle Toby's, Wahgunyah, Australia)	66 ± 9	94	Healthy, 10	Glucose, 2 h	UO ⁴	30	18	12
186 Healthwise for heart health (Uncle Toby's, Australia)	48 ± 5	69	Healthy, 10	Glucose, 2 h	UO ⁴	30	19	9

187 Honey Rice Bubbles (Kellogg's, Australia)	77 ± 4	110	Healthy, 10	Glucose, 2 h	UO ⁴	30	27	20
188 Honey Smacks (Kellogg's, Australia)	71 ± 10	101	Healthy, 10–12	Bread, 2 h	17	30	23	11
189 Hot cereal, apple and cinnamon (Con Agra Inc, USA)	37 ± 6	53 ± 8	Healthy, 10	Bread, 2 h	UO ⁴	30	22	8
190 Hot cereal, unflavored (Con Agra Inc, USA)	25 ± 5	36 ± 7	Healthy, 10	Bread, 2 h	UO ⁴	30	19	5
191 Just Right (Kellogg's, Australia)	60 ± 15	86	Healthy, 10–12	Bread, 2 h	17	30	22	13
192 Just Right Just Grains (Kellogg's, Australia)	62 ± 11	88 ± 16	Healthy, 10	Bread, 2 h	UO ⁴	30	23	14
193 Komplete (Kellogg's, Australia)	48 ± 5	68 ± 7	Healthy, 10	Bread, 2 h	UO ⁴	30	21	10
194 Life (Quaker Oats Co, Canada) ¹⁵	66	94 ± 8	Type 1 and 2, 9	Bread, 3 h	1	30	25	15
195 Mini Wheats, whole wheat (Kellogg's, Australia)	58 ± 8	83	Healthy, 8	Bread, 2 h	13	30	21	12
196 Mini Wheats, blackcurrant (Kellogg's, Australia)	72 ± 10	103	Healthy, 10–12	Bread, 2 h	17	30	21	15
Muesli	—	—	—	—	—	30	21	12
197 Muesli, NS (Canada)	66 ± 9	94	Healthy, 6	Glucose, 2 h	3	30	24	17
198 Alpen Muesli (Wheetabix, France)	55 ± 10	77	Healthy, 14	Glucose, 2 h	UO ⁷	30	19	10

199 Muesli, gluten-free (Freedom Foods, Cheltenham, Australia) with 1.5%-fat milk	39 ± 6	56	Healthy, 9	Glucose, 2 h	UO ⁴ 30	19	7
200 Muesli, Lite (Sanitarium, New Zealand)	54 ± 12	77	Healthy, 10	Glucose, 2 h	25 30	18	10
201 Muesli, Natural (Sanitarium, New Zealand)	57 ± 9	81	Healthy, 10	Glucose, 2 h	25 30	19	11
202 Muesli, Natural (Sanitarium, Australia)	40 ± 6	57	Healthy, 10	Glucose, 2 h	UO ⁴ 30	19	8
Mean of 2 studies	49 ± 9	69 ± 12	—	—	— 30	20	10
203 Muesli, No Name (Sunfresh Ltd, Toronto, Canada) ¹⁵	60	85 ± 12	Type 1 and 2, 9	Bread, 3 h	1 30	18	11
204 Muesli, Swiss Formula (Uncle Toby's, Australia)	56 ± 8	80	Healthy, 8	Bread, 2 h	2 30	16	9
205 Muesli, toasted (Purina, Sydney, Australia)	43 ± 4	61	Healthy, 8	Bread, 2 h	2 30	17	7
206 Nutrigrain (Kellogg's, Australia)	66 ± 12	94	Healthy, 8	Bread, 2 h	2 30	15	10
207 Oat 'n Honey Bake (Kellogg's, Australia)	77 ± 11	111 ± 16	Healthy, 10	Bread, 2 h	UO ⁴ 30	17	13
208 Oat bran							
Oat bran, raw (Quaker Oats Co, Canada) ¹⁵	50	72 ± 6	Type 1 and 2, 11	Bread, 3 h	1 10	5	2
Oat bran, raw	59	84	Type 2, 13	Bread, 3 h	26 10	5	3
Mean of 2 studies	55 ± 5	78 ± 6	—	—	— 10	5	3

209 Porridge made from rolled oats

Porridge (Uncle Toby's, Australia) ¹³	42	60 ± 5	Healthy, 7	Bread, 3 h	44 250	21	9
Porridge (Canada) ¹⁶	49 ± 8	70	Healthy, 6	Glucose, 2 h	3 250	23	11
Traditional porridge oats (Lowan Whole Foods, Box Hill, Australia)	51 ± 8	73 ± 12	Healthy, 10	Bread, 2 h	UO ⁴ 250	21	11
Porridge (Hubbards, New Zealand)	58 ± 9	82	Healthy, 10	Glucose, 2 h	25 250	21	12
Porridge (Australia)	58 ± 4	83	Healthy, 7	Bread, 2 h	48 250	21	12
Porridge (Canada)	62	88	Diabetic, number NS	Glucose, time NS	20 250	23	14
Porridge (Canada)	69	98 ± 9	Type 2, 6	Bread, 3 h	30 250	23	16
Porridge (USA) ⁶	75	107	Type 2, 8	Glucose, 3 h	4 250	23	17
Mean of 8 studies	58 ± 4	83 ± 5	—	—	— 250	22	13
210 Whole-meal oat-flour porridge (flour:water, 1:3), boiled 2.5 min (Sweden)							
	74	106 ± 19	Healthy, 8	Bread, 2 h	14 50 (dry)	32	24
211 Oat porridge made from thick (1.0 mm) dehulled oat flakes (Sweden)							
	55	78 ± 9	Healthy, 10	Bread, 2 h	46 250	27	15
212 Oat porridge made from roasted thin (0.5 mm) dehulled oat flakes (Sweden)							
	69	99 ± 10	Healthy, 10	Bread, 2 h	46 250	27	19

213 Oat porridge made from roasted thick (1.0 mm) dehulled oat flakes (Sweden)	50	72 ± 9	Healthy, 10	Bread, 2 h	46	250	27	14
214 Oat porridge made from roasted and steamed thin (0.5 mm) dehulled oat flakes (Sweden)	80	114 ± 12	Healthy, 10	Bread, 2 h	46	250	27	22
215 Oat porridge made from steamed thick (1.0 mm) dehulled oat flakes (Sweden)	53	76 ± 8	Healthy, 10	Bread, 2 h	46	250	27	14
216 Instant porridge								
Quick Oats (Quaker Oats Co, Canada)	65	93	Type 2, 6	Bread, 3 h	49	—	—	—
One Minute Oats (Quaker Oats Co, Canada) ¹⁵	66	94 ± 10	Type 1 and 2, 7	Bread, 3 h	1	—	—	—
Mean of 2 studies	66 ± 1	94 ± 1	—	—	—	250	26	17
217 Pop Tarts, double chocolate (Kellogg's, Australia)	70 ± 2	100	Healthy, 10	Glucose, 2 h	UO ⁴	50	36	25
218 Pro Stars (General Mills Inc, Canada) ¹⁵	71	102 ± 7	Type 1 and 2, 10	Bread, 3 h	1	30	24	17
219 Puffed wheat								
Puffed Wheat (Quaker Oats Co, Canada) ¹⁵	67	96 ± 7	Type 1 and 2, 10	Bread, 3 h	1	30	20	13
Puffed Wheat (Sanitarium, Sydney, Australia)	80 ± 11	114	Healthy, 8	Glucose, 2 h	38	30	21	17
Mean of 2 studies	74 ± 7	105 ± 9	—	—	—	30	21	16

220 Raisin Bran (Kellogg's, USA)	61 ± 5	87 ± 7	Healthy, 10	Bread, 2 h	UO ⁴	30	19	12
221 Red River Cereal (Maple Leaf Mills, Toronto, Canada)	49	70 ± 5	Type 1 and 2, 9	Bread, 3 h ¹³	1	30	22	13
222 Rice Bran, extruded (Rice Growers Co-Operative Ltd, Leeton, Australia)	19 ± 3	27	Healthy, 8	Bread, 2 h	48	30	14	3
223 Rice Bubbles (puffed rice)								
Rice Bubbles (Kellogg's, Australia) ¹³	81	116 ± 11	Healthy, 7	Bread, 3 h	44	—	—	—
Rice Bubbles (Kellogg's, Australia)	85 ± 3	121	Healthy, 10	Glucose, 2 h	UO ⁴	—	—	—
Rice Bubbles (Kellogg's, Australia)	95	136	Healthy, 6	Glucose, 2 h	47	—	—	—
Mean of 3 studies	87 ± 4	124 ± 6	—	—	—	30	26	22
224 Rice Chex (Nabisco Brands Ltd, Canada) ¹⁵	89	127 ± 5	Type 1 and 2, 11	Bread, 3 h	1	30	26	23
225 Rice Krispies (Kellogg's Inc, Canada) ¹⁵	82	117 ± 5	Type 1 and 2, 12	Bread, 3 h	1	30	26	22
226 Shredded wheat	—	—	—	—	—	30	25	22
Shredded Wheat (Canada)	67 ± 10	96	Healthy, 6	Glucose, 2 h	3	30	20	13
Shredded Wheat (Nabisco Brands Ltd, Canada) ¹⁵	83	118 ± 6	Type 1 and 2, 14	Bread, 3 h	1	30	20	17
Mean of 2 studies	75 ± 8	107 ± 11	—	—	—	30	20	15

Special K (formulation of this cereal varies in different countries)

227 Special K (Kellogg's, Australia)	54 ± 4	77	Healthy, 8	Bread, 2 h	13 30	21	11
228 Special K (Kellogg's, USA)	69 ± 5	98 ± 7	Healthy, 10	Bread, 2 h	UO ⁴ 30	21	14
229 Special K (Kellogg's, France)	84 ± 12	118	Healthy, 12	Glucose, 2 h	UO ⁷ 30	24	20
230 Soy Tasty (flaked grains, soy nuts, dried fruit) (Sanitarium, Australia)	60 ± 5	86	Healthy, 10	Glucose, 2 h	UO ⁴ 30	20	12
231 Soytana, Vogel's, soy and linseed bran crunch with sultanas (20.1 g fiber/100 g) (Specialty Cereals, Mt Kuring-gai, Australia)	49 ± 3	70	Healthy, 10	Glucose, 2 h	UO ⁴ 45	25	12
232 Sultana Bran (Kellogg's, Australia)	73 ± 13	104	Healthy, 7–10	Bread, 2 h	8 30	19	14
233 Sustain (Kellogg's, Australia) ¹³	68	97 ± 9	Healthy, 7	Bread, 3 h	44 30	22	15
234 Team (Nabisco Brands Ltd, Canada) ¹⁵	82	117 ± 9	Type 1 and 2, 10	Bread, 3 h	1 30	22	17
235 Thank Goodness (Hubbards, New Zealand)	65 ± 18	93	Healthy, 11	Glucose, 2 h	25 30	23	15
236 Total (General Mills Inc, Canada) ¹⁵	76	109 ± 6	Type 1 and 2, 10	Bread, 3 h	1 30	22	17
237 Ultra-bran, Vogel's, soy and linseed al (30.2 g fiber/100 g) (Specialty Cereals, Australia)	41 ± 4	59	Healthy, 10	Glucose, 2 h	UO ⁴ 30	13	5

238 Wheat-bites (Uncle Toby's, Australia)	72 ± 11	103	Healthy, 8	Bread, 2 h	13 30	25	18
239 Wheat biscuits (plain flaked wheat)							
Vita-Brits (Uncle Toby's, Australia) ¹³	61	87 ± 14	Healthy, 7	Bread, 3 h	44 30	20	12
Vita-Brits (Uncle Toby's, Australia)	68 ± 6	97	Healthy, 10	Glucose, 2 h	UO ⁴ 30	20	13
Weet-Bix (Sanitarium, Australia)	69	99	Healthy, 12	Bread, 2 h	UO ⁴ 30	17	12
Weet-Bix (Sanitarium, Australia)	69 ± 4	99	Healthy, 10	Glucose, 2 h	UO ⁴ 30	17	12
Weetabix (Weetabix of Canada Ltd, Thornhill, Canada) ¹⁵	74	105 ± 8	Type 1 and 2, 11	Bread, 3 h	1 30	22	16
Weetabix (Weetabix of Canada Ltd)	75 ± 10	107	Healthy, 6	Glucose, 2 h	3 30	22	16
Whole-wheat Goldies (Kellogg's, Australia)	70 ± 4	100	Healthy, 10	Glucose, 2 h	UO ⁴ 30	20	14
Mean of 7 studies	70 ± 2	96 ± 4	—	—	— 30	19	13
Wheat biscuits (flaked wheat) with additional ingredients							
240 Good Start, muesli wheat biscuits (Sanitarium, Australia)	68 ± 4	96	Healthy, 10	Glucose, 2 h	UO ⁴ 30	20	14
241 Hi-Bran Weet-Bix, wheat biscuits with extra wheat bran (Sanitarium, Australia)	61 ± 4	87	Healthy, 10	Glucose, 2 h	UO ⁴ 30	17	10

242 Hi-Bran Weet-Bix with soy and linseed (Sanitarium, Australia)	57 ± 3	81	Healthy, 10	Glucose, 2 h	UO ⁴ 30	16	9
243 Honey Goldies (Kellogg's Australia)	72 ± 3	103	Healthy, 10	Glucose, 2 h	UO ⁴ 30	21	15
244 Lite-Bix, plain, no added sugar (Sanitarium, Australia)	70 ± 3	97	Healthy, 10	Glucose, 2 h	UO ⁴ 30	20	14
245 Oat bran Weet-Bix (Sanitarium, Australia)	57 ± 4	82	Healthy, 10	Glucose, 2 h	UO ⁴ 30	20	11
246 Sultana Goldies (Kellogg's Australia)	65 ± 6	93	Healthy, 10	Glucose, 2 h	UO ⁴ 30	21	13

BREAKFAST CEREAL BARS

247 Crunchy Nut Cornflakes bar (Kellogg's, Australia)	72 ± 6	102 ± 8	Healthy, 10	Bread, 2 h	UO ⁴ 30	26	19
248 Fibre Plus bar (Uncle Toby's, Australia)	78 ± 9	111	Healthy, 8	Bread, 2 h	13 30	23	18
249 Fruity-Bix bar, fruit and nut, wheat biscuit cereal with dried fruit and nuts with yogurt coating (Sanitarium, Australia)	56 ± 4	80	Healthy, 10	Glucose, 2 h	UO ⁴ 30	19	10
250 Fruity-Bix bar, wild berry, wheat biscuit cereal with fruit and covered with yogurt coating (Sanitarium, Australia)	51 ± 4	73	Healthy, 10	Glucose, 2 h	UO ⁴ 30	19	9
251 K-Time Just Right bar (Kellogg's, Australia)	72 ± 4	103	Healthy, 10	Glucose, 2 h	UO ⁴ 30	24	17
252 K-Time Strawberry Crunch bar (Kellogg's, Australia)	77 ± 5	110	Healthy, 10	Glucose, 2 h	UO ⁴ 30	25	19

253 Rice Bubble Treat bar (Kellogg's, Australia)	63 ± 11	90 ± 15	Healthy, 10	Bread, 2 h	UO ⁴ 30	24	15
254 Sustain bar (Kellogg's, Australia)	57 ± 10	82 ± 15	Healthy, 10	Bread, 2 h	UO ⁴ 30	25	14

CEREAL GRAINS

Amaranth

255 Amaranth (<i>Amaranthus esculentum</i>) popped, eaten with milk and nonnutritive sweetener (India)	97 ± 19	139	Type 2, 6	Glucose, 3 h	43 30	22	21
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Barley

256 Pearl barley

Barley, pearled (Canada)	22	32 ± 3	Type 2, 12	Bread, 3 h	22 —	—	—
Barley (Canada)	22	31	Type 2, 13	Bread, 3 h	26 —	—	—
Barley, pot, boiled in salted water 20 min (Gouda's foods, Concord, Canada)	25 ± 2	36	Healthy, 10	Glucose, 2 h	UO ⁴ —	—	—
Barley (Canada)	27	39 ± 6	Type 2, 4	Bread, 3 h	10 —	—	—
Barley, pearled (Canada)	29	41 ± 10	Type 1, 7	Bread, 3 h	22 —	—	—
Mean of 5 studies	25 ± 1	36 ± 2	—	—	— 150	42	11
257 Barley (<i>Hordeum vulgare</i>) (India)							
Barley (<i>Hordeum vulgare</i>) (India)	37	53	Type 2, 14	Bread, 3 h	50 —	—	—

Barley (<i>Hordeum vulgare</i>) (India)	48	69	Healthy, 18	Bread, 3 h	50	—	—	—
Mean of 2 groups of subjects	43 ± 6	61 ± 8			150		42	26
258 Barley, cracked (Malthouth, Tunisia)	50	72 ± 7	Type 1 and 2, 10	Bread, 3 h	1	150	42	21
259 Barley, rolled (Australia)	66 ± 5	94	Healthy, 8	Bread, 2 h	48	50 (dry)	38	25
260 Buckwheat								
Buckwheat (Canada)	49	70 ± 6	Type 2, 12	Bread, 3 h	22	—	—	—
Buckwheat (Canada)	51 ± 10	73	Healthy, 5	Glucose, 2 h	3	—	—	—
Buckwheat (Canada)	63	90 ± 8	Type 1, 6	Bread, 3 h	22	—	—	—
Mean of 3 studies	54 ± 4	78 ± 6	—	—	—	150	30	16
261 Buckwheat groats, hydrothermally treated, dehusked, boiled 12 min (Sweden)	45	64 ± 10	Healthy, 10	Bread, 2 h	16	150	30	13
Corn and maize								
262 Maize (<i>Zea mays</i>), flour made into chapatti (India)	59	85	Healthy, 18	Bread, 3 h	50	—	—	—
263 Maize meal porridge, gruel (Kenya)	109	156 ± 15	Type 2, 13	Bread, 2.5 h	40	—	—	—
264 Cornmeal								
Cornmeal, boiled in salted water 2 min (McNair Products Co Ltd, Toronto, Canada)	68	97 ± 5	Type 1 and 2, 12	Bread, 3 h	1	150	13	9
Cornmeal + margarine (McNair Products Co Ltd, Canada)	69	99 ± 10	Type 1 and 2, 12	Bread, 3 h	1	150	12	9

Mean of 2 studies	69 ± 1	98 ± 1	—	—	—	150	13	9
265 Sweet corn								
Sweet corn, honey and pearl variety (New Zealand)	37 ± 12	53	Healthy, 9	Glucose, 2 h	25	150	30	11
Sweet corn, on the cob, boiled 20 min (Australia)	48	69	Healthy, 6	Glucose, 2 h	47	150	30	14
Sweet corn (Canada)	59 ± 11	84	Healthy, 5	Glucose, 2 h	3	150	33	20
Sweet corn (USA)	60	86	Healthy, 16	Bread, 3 h	51	150	33	20
Sweet corn (USA)	60	85	Type 2, 5; IGT, 6 ¹⁰	Bread, 3 h	28	150	33	20
Sweet corn (South Africa)	62 ± 5	89	Healthy, 7	Glucose, 2 h	29	150	33	20
Mean of 6 studies	53 ± 4	78 ± 6	—	—	—	150	32	17
266 Sweet corn, whole kernel, canned, diet-pack, drained, featherweight (USA)								
	46	66	Type 2, 20	Bread, 3 h	52	150	28	13
267 Sweet corn, frozen, reheated in microwave								
(Green Giant Pillsbury Ltd, Toronto, Canada)	47	67 ± 4	Type 1 and 2, 9	Bread, 3 h	1	150	33	16
268 Taco shells, cornmeal based, baked (Old El Paso Foods Co, Toronto, Canada)								
	68	97 ± 9	Type 1 and 2, 10	Bread, 3 h	1	20	12	8

Couscous

269 Couscous, boiled 5 min

Couscous, boiled 5 min (Near East Food Products Co, Leominster, MA, USA)	61	87 ± 7	Type 1 and 2, 9	Bread, 3 h	1	—	—	—
Couscous, boiled 5 min (Tunisia)	69	99 ± 6	Type 1 and 2, 9	Bread, 3 h	1	—	—	—
Mean of 2 studies	65 ± 4	93 ± 6	—	—	—	150	35	23
Millet								
270 Millet, boiled (Canada)	71 ± 10	101	Healthy, 5	Glucose, 2 h	3	150	36	25
271 Millet flour porridge (Kenya)	107	153 ± 14	Type 2, 13	Bread, 2 h	40	—	—	—
Rice, white								
272 Arborio, risotto rice, boiled (Sun Rice brand, Rice Growers Co-Op, Leeton, Australia)	69 ± 7	99	Healthy, 10	Glucose 2 h	UO ⁴	150	53	36
273 White (<i>Oryza sativa</i>), boiled (India)	69 ± 15	99	Type 2, 6	Glucose, 3 h	43	150	43	30
274 Rice, boiled white, type NS								
Type NS, eaten alone (France)	45	64	Type 2, 30	Glucose, 3 h ¹⁴	53	150	30	14
Type NS (India)	48	68	Healthy, 6	Wheat chapatti, 2 h ¹⁷	54	150	38	18
Type NS (Canada)	51	73	Diabetic NS	Glucose, time NS	20	150	42	21
Type NS (France)	52	74 ± 9	Type 2, 6	Bread, 3 h	55	150	36	19

Type NS (Canada)	56	80 ± 5	Type 2, 6	Bread, 3 h	30	150	42	23
Type NS (Pakistan)	69	98	Type 2, 22	Wheat chapatti, 3 h ¹⁷	56	150	38	26
Type NS (Canada)	72 ± 9	103	Healthy, 7	Glucose, 2 h	3	150	42	30
Type NS, boiled in salted water (India)	72	103	Healthy, 8	Bread, 3 h	57	150	38	27
Type NS, boiled 13 min (Italy)	102	146	Healthy, 14	Glucose, 2 h	58	150	30	31
Type NS (Kenya)	112	160 ± 34	Type 2, 10	Bread, 2 h	40	150	42	47
Type NS, boiled (France)	43	61	Type 2, 14	Glucose, 3 h ¹⁴	53	150	30	13
Type NS, boiled (France)	47	66	Type 2, 16	Glucose, 3 h ¹⁴	53	150	30	14
Mean of 12 studies	64 ± 7	91 ± 9	—	—	—	150	36	23
275 Type NS, boiled in salted water, refrigerated 16–20 h, reheated (India)	53	76	Healthy, 8	Bread, 3 h	57	150	38	20
276 Type NS, boiled 13 min, then baked 10 min (Italy)	104	149	Healthy, 14	Glucose, 2 h	58	150	30	31
277 Long grain, boiled								
Long grain, boiled 5 min (Canada)	41	58 ± 4	Type 2, 13	Bread, 3 h	59	150	40	16

Long grain, white, unconverted, boiled 15 min (Mahatma brand; Riviana Foods, Wetherill Park, Australia)	50	71	Healthy, 6	Glucose, 2 h	47	150	43	21
Gem long grain (Dainty Food Inc, Toronto, Canada)	55	79	Type 2, 10	Bread, 3 h	60	150	40	22
Long grain, white (Uncle Bens, Auckland, New Zealand)	56 ± 7	80	Healthy, 14	Glucose, 2 h	25	150	43	24
Long grain, boiled 25 min (Surinam)	56 ± 2	80	Type 2, 3	Glucose, 3 h	9	150	43	24
Gem long grain (Dainty Food Inc, Canada)	57	82	Type 1, 6	Bread, 3 h	60	150	40	23
Long grain, boiled 15 min	58	83 ± 5	Type 1, 5; type 2, 13	Bread, 3 h	59	150	40	23
Gem long grain (Dainty Food Inc, Canada)	60	86 ± 6	Type 2, 13	Bread, 3 h	22	150	40	24
Gem long grain (Dainty Food Inc, Canada)	60	86 ± 11	Type 1, 6	Bread, 3 h	22	150	40	24
Long grain, white, boiled 7 min (Star brand; Gouda foods, Concord, Canada)	64 ± 3	91	Healthy, 10	Glucose, 2 h	UO ⁴	150	40	26
Mean of 10 studies	56 ± 2	80 ± 3	—	—	—	150	41	23
Rice, long grain, quick-cooking varieties								
278 Long grain, parboiled 10 min cooking time (Uncle Ben's; Masterfoods, Belgium)	68 ± 6	97	Healthy, 10	Glucose, 2 h	UO ⁴	150	37	25

279 Long grain, parboiled, 20 min cooking time (Uncle Ben's; Masterfoods, Belgium)	75 ± 7	107	Healthy, 10	Glucose, 2 h	UO ⁴ 150	37	28
280 Long grain, white, precooked, microwaved 2 min (Express Rice, plain, Uncle Ben's; King's Lynn, Norfolk, UK)	52 ± 5	74	Healthy, 10	Glucose, 2 h	UO ⁴ 150	37	19
Rice, specialty rices							
281 Cajun Style (Uncle Ben's; Effem Foods Ltd, Bolton, Canada)	51	72 ± 13	Type 1 and 2, 8	Bread, 3 h	1 150	37	19
282 Garden Style (Uncle Ben's; Effem Foods Ltd, Canada)	55	79 ± 6	Type 1 and 2, 11	Bread, 3 h	1 150	37	21
283 Long Grain and Wild (Uncle Ben's; Effem Foods Ltd, Canada)	54	77 ± 9	Type 1 and 2, 8	Bread, 3 h	1 150	37	20
284 Mexican Fast and Fancy (Uncle Ben's; Effem Foods Ltd, Canada)	58	83 ± 7	Type 1 and 2, 11	Bread, 3 h	1 150	37	22
285 Saskatchewan wild rice (Canada)	57	81 ± 8	Type 1 and 2, 9	Bread, 3 h	1 150	32	18
286 Broken rice, white, cooked in rice cooker (Lion Foods, Bangkok, Thailand)	86 ± 10	123 ± 14	Healthy, 12	Glucose, 2 h	UO ⁴ 150	43	37
287 Glutinous rice, white, cooked in rice cooker (Bangsue Chia Meng Rice Mill, Bangkok, Thailand)	98 ± 7	140 ± 10	Healthy, 12	Glucose, 2 h	UO ⁴ 150	32	31
288 Jasmine rice, white long grain, cooked in rice cooker (Golden World Foods, Bangkok, Thailand)	109 ± 10	156 ± 14	Healthy, 12	Glucose, 2 h	UO ⁴ 150	42	46

Rice, white low-amylose

289 Calrose, white, medium grain, boiled (Rice Growers Co-op, Australia)	83 ± 13	119	Healthy, 8	Bread, 2 h	48	150	43	36
290 Sungold, Pelde, parboiled (Rice Growers Co-op, Australia)	87 ± 7	124	Healthy, 8	Bread, 2 h	48	150	43	37
291 Waxy (0–2% amylose) (Rice Growers Co-op, Australia)	88 ± 11	126	Healthy, 7	Bread, 2 h	48	150	43	38
292 Pelde, white (Rice Growers Co-op, Australia)	93 ± 11	133	Healthy, 7	Bread, 2 h	48	150	43	40
293 White, low-amylose, boiled (Turkey)	139	199	Type 2, 52; healthy, 31	Glucose, 2 h	32	150	43	60

Rice, white high-amylose

294 Bangladeshi rice variety BR16								
Bangladeshi rice variety BR16 (28% amylose)	37	53 ± 7	Type 2, 12	Bread, 3 h	61	150	39	14
Bangladeshi rice variety BR16, white, long grain (27% amylose), boiled 17.5 min	39	55 ± 5	Type 2, 9	Bread, 3 h	62	150	39	15
Mean of 2 studies	38	54 ± 1	—	—	—	150	39	15
295 Doongara, white (Rice Growers Co-op, Australia)								
Doongara, white (Rice Growers Co-op, Australia)	50 ± 6	69	Healthy, 8	Bread, 2 h	63	—	—	—
Doongara, white (Rice Growers Co-op, Australia)	64 ± 9	91	Healthy, 8	Bread, 2 h	48	—	—	—

Doongara, white (Rice Growers Co-op, Australia)	54 ± 7	75	Healthy, 9	Bread, 2 h	63	—	—	—
Mean of 3 studies	56 ± 4	78 ± 7	—	—	—	150	39	22
296 Koshikari (Japonica), white, short-grain, boiled 15 min then steamed 10 min (Japan)	48 ± 8	68	Healthy, 8	Glucose, 3 h	64	150	38	18
297 Basmati								
Basmati, white, boiled (Mahatma brand, Sydney, Australia)	58 ± 8	83	Healthy, 9	Bread, 2 h	63	150	38	22
Precooked basmati rice in pouch, white, reheated in microwave (Uncle Ben's Express; Masterfoods. Kings Lynn, Norfolk, UK)	57 ± 4	81	Healthy, 10	Glucose, 2 h	UO ⁴	150	41	24
Quick-cooking white basmati, cooked 10 min (Uncle Ben's Superior; Masterfoods Olen, Belgium)	60 ± 5	86	Healthy, 10	Glucose, 2 h	UO ⁴	150	38	23
298 Rice, brown								
Brown (Canada)	66 ± 5	94	Healthy, 7	Glucose, 2 h	3	150	33	21
Brown, steamed (USA) ^δ	50	72	Healthy, 8	Glucose, 3 h ¹⁸	45	150	33	16
Brown (<i>Oryza sativa</i>), boiled (South India) ^δ	50 ± 19	72	Healthy, 12–15	Glucose, 3 h ¹⁸	65	150	33	16
Mean of 3 studies	55 ± 5	79 ± 6	—	—	—	150	33	18
Calrose brown (Rice Growers Co-op, Australia)	87 ± 8	124	Healthy, 8	Bread, 2 h	48	150	38	33

Doongara brown, high-amylose (Rice Growers Co-op, Australia)	66 ± 7	94	Healthy, 8	Bread, 2 h	48 150	37	24
Pelde brown (Rice Growers Co- op, Australia)	76 ± 6	109	Healthy, 8	Bread, 2 h	48 150	38	29
Parboiled, cooked 20 min (Uncle Ben's Natur-reis; Masterfoods Olen, Belgium)	64 ± 7	91	Healthy, 10	Glucose, 2 h	UO ⁴ 150	36	23
Sunbrown Quick (Rice Growers Co-op, Australia)	80 ± 7	114	Healthy, 8	Bread, 2 h	48 150	38	31
299 Instant or puffed rice							
Instant rice, white, boiled 1 min (Canada)	46	65 ± 5	Type 2, 13	Bread, 3 h	59 150	42	19
Instant rice, white, cooked 6 min (Trice brand; Australia)	87	124	Healthy, 6	Glucose, 2 h	47 150	42	36
Puffed, white, cooked 5 min (Uncle Ben's Snabbris; Masterfoods Olen, Belgium)	74 ± 5	106	Healthy, 10	Glucose, 2 h	UO ⁴ 150	42	31
Mean of 3 studies	69 ± 12	98 ± 17	—	—	— 150	42	29
Instant doongara, white, cooked 5 min (Rice Growers Co-op, Australia)	94 ± 7	132	Healthy, 9	Bread, 2 h	63 150	42	35
300 Parboiled rice							
Parboiled rice (Canada)	48	68 ± 6	Type 2, 13	Bread, 3 h	22 150	36	18
Parboiled rice (USA)	72	103	Type 2, 5; IGT, 6 ¹⁰	Bread, 3 h	28 150	36	26

Converted, white (Uncle Ben's; Effem Foods Ltd, Canada)	45	64 ± 7	Type 1, 5	Bread, 3 h	22 150	36	16
Converted, white, boiled 20–30 min (Uncle Ben's; Masterfoods USA, Vernon, CA)	38	54	Healthy, 16	Bread, 3 h	51 150	36	14
Converted, white, long grain, boiled 20–30 min (Uncle Ben's; Masterfoods USA)	50	72	Type 2, 20	Bread, 3 h	52 150	36	18
		55 ±					
Boiled, 12 min (Denmark) ⁶	39	10	Type 2, 7	Bread, 2 h	66 150	36	14
Boiled, 12 min (Denmark)	42	60 ± 8	Type 2, 7	Bread, 2 h	66 150	36	15
Boiled, 12 min (Denmark)	43	62 ± 9	Type 2, 11	Bread, 5 h	67 150	36	16
Boiled, 12 min (Denmark)	46	66 ± 5	Type 2, 12	Bread, 5 h	67 150	36	17
Long grain, boiled 5 min (Canada)	38	54 ± 5	Type 2, 13	Bread, 3 h	59 150	36	14
Long grain, boiled, 10 min (USA) ⁸	61	87	Type 2, 8	Glucose, 3 h	4 150	36	22
Long grain, boiled 15 min (Canada)	47	67 ± 5	Type 1, 5; type 2, 13	Bread, 3 h	59 150	36	17
Long grain, boiled 25 min (Canada)	46	66 ± 4	Type 2, 13	Bread, 3 h	59 150	36	17
Mean of 13 studies	47 ± 3	68 ± 4	—	—	— 150	36	17
301 Parboiled rice, eaten as part of a traditional Indian meal (India) ⁸	99	141	Type 2, 20	Glucose, 2 h	68 —	—	—
302 Parboiled, low-amylose							

Bangladeshi rice variety BR2, parboiled (12% amylose)	51	73 ± 7	Type 2, 12	Bread, 3 h	61 150	38	19
Parboiled, low-amylose, Pelde, Sungold (Rice Growers Co-op, Australia)	87 ± 7	124	Healthy, 8	Bread, 2 h	48 150	39	34
303 Parboiled, high-amylose							
Parboiled, high-amylose (28%), Doongara (Rice Growers Co-op, Australia)	50 ± 6	69	Healthy, 8	Bread, 2 h	63 150	39	19
Bangladeshi rice variety BR16, parboiled (28% amylose)	35	50 ± 7	Type 2, 12	Bread, 3 h	61 150	37	13
Bangladeshi rice variety BR16, traditionally parboiled (27% amylose)	32	46 ± 8	Type 2, 9	Bread, 3 h	62 150	38	12
Bangladeshi rice variety BR16, pressure parboiled (27% amylose)	27	39 ± 6	Type 2, 9	Bread, 3 h	62 150	41	11
Bangladeshi rice variety BR4, parboiled (27% amylose)	33	47 ± 4	Type 2, 12	Bread, 3 h	61 150	38	13
Mean of 5 studies	35 ± 4	50 ± 5	—	—	— 150	39	14
304 Rye, whole kernels							
Rye, whole kernels (Canada)	29	42 ± 7	Type 2, 9	Bread, 3 h	22 50 (dry)	38	11
Rye, whole kernels, pressure cooked (15 psi) 30 min in 2 L water (Canada)	34	47 ± 5	Type 1, 5; type 2, 9	Bread, 3 h	21 50 (dry)	38	13
Rye, whole kernels (Canada)	39	56 ± 12	Type 1, 7	Bread, 3 h	22 50 (dry)	38	15
Mean of 3 studies	34 ± 3	48 ± 4	—	—	— 50 (dry)	38	13

Wheat

305 Wheat, whole kernels								
Wheat, whole kernels (<i>Triticum aestivum</i>) (India) ¹¹	30 ± 9	43	Healthy, 12–15	Glucose, 3 h ¹⁸	65	50 (dry)	38	11
Wheat, whole kernels (Canada)	42	60 ± 8	Type 2, 11	Bread, 3 h	22	50 (dry)	33	14
Wheat, whole kernels, pressure cooked (15 psi) 30 min in 2 L water (Canada)	44	63 ± 6	Type 1, 6;	Bread, 3 h	21	50 (dry)	33	14
Wheat, whole kernels (Canada)	48	69 ± 7	Type 1, 7	Bread, 3 h	22	50 (dry)	33	16
Mean of 4 studies	41 ± 3	59 ± 4	—	—	—	50 (dry)	34	14
306 Wheat, type NS (India)	90	129	Type 2, 20	Glucose, 2 h	68	50 (dry)	38	34
307 Wheat, precooked kernels								
Durum wheat, precooked, cooked 20 min (Ebly, Chateaudun, France)	52 ± 4	74	Healthy, 10	Glucose, 2 h	UO ⁴	50 (dry)	37	19
Durum wheat, precooked, cooked 10 min (Ebly, France)	50 ± 5	71	Healthy, 10	Glucose, 2 h	UO ⁴	50 (dry)	33	17
Durum wheat, precooked in pouch, reheated in microwave (Ebly Express; Ebly, France)	40 ± 5	57	Healthy, 10	Glucose, 2 h	UO ⁴	125	39	16
Quick cooking (White Wings, Sydney, Australia)	54 ± 11	77	Healthy, 8	Glucose, 2 h	39	150	47	25
308 Semolina								
Semolina, roasted at 105 °C then gelatinized with water (India)	55 ± 9	79	Type 2, 6	Glucose, 2 h	69	—	—	—

Semolina, steamed and gelatinized (India)	54 ± 13	77	Type 2, 6	Glucose, 2 h	69	—	—	—
Mean of 2 studies	55 ± 1	78 ± 1	—	—	—	150	11	6
309 Cracked wheat (bulgur or bourghul)								
Bulgur, boiled (Canada)	46	66 ± 4	Type 2, 6	Bread, 3 h	10	—	—	—
Bulgur, boiled in 800 mL water 20 min (Canada)	46	65 ± 4	Type 1, 5;	Bread, 3 h	21	—	—	—
Bulgur, boiled 20 min (Canada)	46	65 ± 5	Type 2, 12	Bread, 3 h	22	—	—	—
Bulgur, boiled 20 min (Canada)	53	75 ± 13	Type 1, 6	Bread, 3 h	22	—	—	—
Mean of 4 studies	48 ± 2	68 ± 3	—	—	—	150	26	12

COOKIES

Arrowroot

310 Arrowroot (McCormick's, Interbare Foods, Toronto, Canada)	63	90 ± 4	Type 1 and 2, 13	Bread, 3 h	1	25	20	13
311 Arrowroot plus (McCormick's, Canada)	62	88 ± 7	Type 1 and 2, 9	Bread, 3 h	1	25	18	11
312 Milk Arrowroot (Arnotts, Sydney, Australia)	69 ± 7	99	Healthy, 8	Bread, 2 h	2	25	18	12
Mean of 3 studies	65 ± 2	92 ± 3	—	—	—	25	19	12
313 Barquette Abricot (LU, Ris, Orangis, France)	71 ± 6	101	Healthy, 11	Glucose, 2 h	UO ⁷	40	32	23
314 Bebe Dobre Rano Chocolate (Opavia/LU, Czech Republic)	57 ± 9	81	Healthy, 11	Glucose, 2 h	UO ^{7,19}	50	33	19

315 Bebe Dobre Rano Honey and Hazelnuts (Opavia/LU, Czech Republic)	51 ± 9	73	Healthy, 11	Glucose, 2 h	UO ^{7,19}	50	34	17
316 Bebe Jemne Susenky (Opavia/LU, Czech Republic)	67 ± 11	96	Healthy, 11	Glucose, 2 h	UO ^{7,19}	25	20	14
317 Digestives								
Digestives (Canada)	55	79 ± 9	Type 2, 6	Bread, 3 h	30	—	—	—
Digestives (Canada)	59 ± 7	84	Healthy, 6	Glucose, 2 h	3	—	—	—
Digestives, Peak Freans (Nabisco Ltd, Toronto, Canada)	62	88 ± 7	Type 1 and 2, 13	Bread, 3 h	1	—	—	—
Mean of 3 studies	59 ± 2	84 ± 2	—	—	—	25	16	10
318 Digestives, gluten-free (maize starch) (Nutricia Dietary Care Ltd, Redish, Stockport, UK)								
	58	83 ± 14	Type 2, 11	Bread, 3 h	18	25	17	10
319 Evergreen met Krenten (LU, Netherlands)	66 ± 12	94	Healthy, 12	Glucose, 2 h	UO ⁷	38	21	14
320 Golden Fruit (Griffin's Foods Ltd, Auckland, New Zealand)	77 ± 25	110	Healthy, 10	Glucose, 2 h	25	25	17	13
321 Graham Wafers (Christie Brown and Co, Toronto, Canada)	74	106 ± 9	Type 1 and 2, 9	Bread, 3 h	1	25	18	14
322 Gran'Dia Banana, Oats and Honey (LU, Brazil)	28 ± 5	40	Healthy, 12	Glucose, 2 h	UO ⁷	30	23	6
323 Grany en-cas Abricot (LU, France)	55 ± 6	79	Healthy, 12	Glucose, 2 h	UO ⁷	30	16	9
324 Grany en-cas Fruits des bois (LU, France)	50 ± 5	71	Healthy, 14	Glucose, 2 h	UO ⁷	30	14	7

325 Grany Rush Apricot (LU, Netherlands)	62 ± 3	89	Healthy, 12	Glucose, 2 h	UO ²⁰	30	20	12
326 Highland Oatmeal (Westons biscuits, Sydney, Australia)	55 ± 8	79	Healthy, 7	Bread, 2 h	2	25	18	10
327 Highland Oatcakes (Walker's Shortbread Ltd, Aberlour-on-Spey, Scotland)	57	81 ± 6	Type 1 and 2, 12	Bread, 3 h	1	25	15	8
328 LU P'tit Déjeuner Chocolat (LU, France)	42 ± 5	60	Healthy, 13	Glucose, 2 h	UO ⁷	50	34	14
329 LU P'tit Déjeuner Miel et Pépites Chocolat (LU, France)	45 ± 5	64	Healthy, 14	Glucose, 2 h	UO ⁷	50	35	16
LU P'tit Déjeuner Miel et Pépites Chocolat (LU, France)	52 ± 3	74	Healthy, 12	Glucose, 2 h	UO ²⁰	50	35	16
LU P'tit Déjeuner Miel et Pépites Chocolat (LU, France)	49 ± 8	70	Healthy, 11	Glucose, 2 h	UO ^{7,19}	50	35	18
Mean of 3 studies	49 ± 2	69 ± 3	—	—	—	50	35	17
330 Maltmeal wafer (Griffin's Foods Ltd, New Zealand)	50 ± 10	71	Healthy, 10	Glucose, 2 h	25	25	17	9
331 Morning Coffee (Arnotts, Australia)	79 ± 6	113	Healthy, 8	Bread, 2 h	2	25	19	15
332 Nutrigrain Fruits des bois (Kellogg's, France)	57 ± 4	81	Healthy, 12	Glucose, 2 h	UO ²⁰	35	23	13
333 Oatmeal (Canada)	54 ± 4	77	Healthy, 6	Glucose, 2 h	3	25	17	9
334 Oro (Saiwa, Italy)								
Oro (Saiwa, Italy)	61 ± 9	87	Healthy, 11	Glucose, 2 h	UO ⁷	40	32	20

Oro (Saiwa, Italy)	67 ± 17	96	Healthy, 13	Glucose, 2 h	UO ²¹	40	32	21
Mean of 2 studies	64 ± 3	92 ± 5	—	—	—	40	32	20
335 Petit LU Normand (LU, France)	51 ± 3	73	Healthy, 12	Glucose, 2 h	UO ²⁰	25	19	10
336 Petit LU Roussillon (LU, France)	48 ± 4	69	Healthy, 12	Glucose, 2 h	UO ²⁰	25	18	9
337 Prince Energie+ (LU, France)	73 ± 5	104	Healthy, 12	Glucose, 2 h	UO ²⁰	25	17	13
338 Prince fourré chocolat (LU, France)								
Prince fourré chocolat (LU, France)	53 ± 5	76	Healthy, 13	Glucose, 2 h	UO ⁷	—	—	—
Prince fourré chocolat (LU, France)	50 ± 5	71	Healthy, 12	Glucose, 2 h	UO ⁷	—	—	—
Mean of 2 studies	52 ± 2	74	—	—	—	45	30	16
339 Prince Meganana Chocolate (LU, Spain)	49 ± 12	70	Healthy, 11	Glucose, 2 h	UO ⁷	50	36	18
340 Prince Petit Déjeuner Vanille (LU, France and Spain)	45 ± 6	64	Healthy, 12	Glucose, 2 h	UO ⁷	50	36	16
341 Rich Tea (Canada)	55 ± 4	79	Healthy, 6	Glucose, 2 h	3	25	19	10
342 Sablé des Flandres (LU, France)	57 ± 10	81	Healthy, 12	Glucose, 2 h	UO ⁷	20	15	8
343 Shortbread (Arnotts, Australia)	64 ± 8	91	Healthy, 8	Glucose, 2 h	39	25	16	10
344 Shredded Wheatmeal (Arnotts, Australia)	62 ± 4	89	Healthy, 7	Bread, 2 h	2	25	18	11

345 Snack Right Fruit Slice (97% fat-free) (Arnott's, Australia)	45 ± 3	64	Healthy, 10	Glucose, 2 h	UO ⁴	25	19	9
346 Thé (LU, France)	41 ± 7	57	Healthy, 12	Glucose, 2 h	UO ⁷	20	16	6
347 Vanilla Wafers (Christie Brown and Co, Canada)	77	110 ± 4	Type 1 and 2, 8	Bread, 3 h	1	25	18	14
348 Véritable Petit Beurre (LU, France)	51 ± 8	73	Healthy, 10	Glucose, 2 h	UO ⁷	25	18	9
CRACKERS								
349 Breton wheat crackers (Dare Foods Ltd, Kitchener, Canada)	67	96 ± 4	Type 1 and 2, 10	Bread, 3 h	1	25	14	10
350 Corn Thins, puffed corn cakes, gluten-free (Real Foods, St Peters, Australia)	87 ± 10	124	Healthy, 10	Glucose, 2 h	UO ⁴	25	20	18
351 Cream Cracker (LU Triumfo, Brazil)	65 ± 11	93	Healthy, 12	Glucose, 2 h	UO ⁷	25	17	11
352 High-calcium cracker (Danone, Malaysia)	52 ± 8	74	Healthy, 12	Glucose, 2 h	UO ⁷	25	17	9
353 Jatz, plain salted craker biscuits (Arnotts, Australia)	55 ± 5	79	Healthy, 8	Bread, 2 h	2	25	17	10
354 Puffed Crispbread (Westons, Australia)	81 ± 9	116	Healthy, 8	Glucose, 2 h	39	25	19	15
355 Puffed rice cakes								
Puffed rice cakes, white (Rice Growers Co-op, Australia)	82 ± 11	117	Healthy, 6	Bread, 2 h	48	25	21	17

Rice cakes, Calrose rice (low-amylose) (Rice Growers Co-op, Australia)	91 ± 7	128	Healthy, 9	Bread, 2 h	63	25	21	19
Rice cakes, Doongara rice (high-amylose) (Rice Growers Co-op, Australia)	61 ± 5	85	Healthy, 9	Bread, 2 h	63	25	21	13
Mean of 3 studies	78 ± 9	110 ± 13	—	—	—	25	21	17
356 Rye crispbread								
Rye crispbread (Canada)	63	90	Type 2, number NS	Glucose, time NS	23	25	16	10
Ryvita (Canada)	69 ± 10	99	Healthy, 7	Glucose, 2 h	3	25	16	11
High-fiber rye crispbread (Ryvita Company Ltd, Poole, Dorset, UK)								
	59	84 ± 7	Type 1 and 2, 9	Bread, 3 h	1	25	15	9
Rye crispbread (Ryvita Company Ltd, UK)	63	90 ± 4	Type 1 and 2, 12	Bread, 3 h	1	25	18	11
Mean of 4 studies	64 ± 2	91 ± 3				25	16	11
357 Kavli Norwegian Crispbread (Players Biscuits, Sydney, Australia)								
	71 ± 7	101	Healthy, 8	Bread, 2 h	13	25	16	12
358 Sao, plain square crackers (Arnotts, Australia)								
	70 ± 9	100	Healthy, 8	Bread, 2 h	2	25	17	12
359 Stoned Wheat Thins (Christie Brown and Co, Canada)								
	67	96 ± 4	Type 1 and 2, 11	Bread, 3 h	1	25	17	12
360 Water cracker								
Water cracker (Canada)	63 ± 9	90	Healthy, 6	Glucose, 2 h	3	25	18	11

Water cracker (Arnotts, Australia)	78 ± 11	111	Healthy, 8	Glucose, 2 h	39 25	18	14
Mean of 2 studies	71 ± 8	101 ± 11	—	—	— 25	18	13
361 Premium Soda Crackers (Christie Brown and Co, Canada)	74	106 ± 5	Type 1 and 2, 10	Bread, 3 h	1 25	17	12
362 Vita-wheat, original, crispbread (Arnott's Australia)	55 ± 4	79	Healthy, 10	Glucose, 2 h	UO ⁴ 25	19	10
DAIRY PRODUCTS AND ALTERNATIVES							
Custard							
363 No Bake Egg Custard, prepared from powder with whole milk (Nestlé, Australia)	35 ± 2	50 ± 3	Healthy, 10	Glucose, 2 h	UO ⁴ 100	17	6
364 Custard, home made from milk, wheat starch, and sugar (Australia)	43 ± 10	61	Healthy, 8	Glucose, 2 h	39 100	17	7
365 TRIM, reduced-fat custard (Pauls Ltd, South Brisbane, Australia)	37 ± 4	52 ± 6	Healthy, 10	Bread, 2 h	UO ⁴ 100	15	6
Mean of 3 studies	38 ± 2	54 ± 3	—	—	— 100	16	6
366 Ice cream, regular, NS							
Ice cream, NS (Canada)	36 ± 8	51	Healthy, 5	Glucose, 2 h	3 —	—	—
Ice cream (half vanilla, half chocolate) (Italy)	57	82 ± 40	Healthy, 7	Bread, 2 h	70 —	—	—

Ice cream, NS (USA)	62	89	Type 2, 7	Glucose, 5 h ²²	6	—	—	—
Ice cream, chocolate flavored (USA)	68 ± 15	97	Type 2, 12	Glucose, 3 h	71	—	—	—
Ice cream (half vanilla, half chocolate) (Italy)	80	114 ± 31	Type 2, 14	Bread, 2 h	70	—	—	—
Mean of 5 studies	61 ± 7	87 ± 10	—	—	—	50	13	8
367 Ice cream, reduced- or low-fat								
Ice cream, low-fat, vanilla (Light; Peter's, Sydney, Australia)	50 ± 8	71	Healthy, 8	Bread, 2 h	2	50	6	3
Ice-cream, low-fat (1.2% fat) (Prestige								
Light rich vanilla; Norco, Lismore, Australia) ⁶	47 ± 5	67	Healthy, 10	Glucose, 2 h	UO ⁴	50	10	5
Ice-cream, low-fat (1.4% fat) (Prestige								
Light traditional toffee; Norco, Australia) ⁶	37 ± 4	53	Healthy, 10	Glucose, 2 h	UO ⁴	50	14	5
Ice-cream, reduced-fat (7.1% fat) (Prestige golden macadamia; Norco, Australia) ⁶								
	39 ± 3	55	Healthy, 10	Glucose, 2 h	UO ⁴	50	12	5
368 Ice cream, premium (high-fat)								

Ice cream, premium, ultra chocolate, 15% fat (Sara Lee, Gosford, Australia)	37 ± 3	53	Healthy, 10	Glucose, 2 h	UO ⁴ 50	9	4
Ice cream, premium, French vanilla, 16% fat (Sara Lee, Australia)	38 ± 3	54	Healthy, 10	Glucose, 2 h	UO ⁴ 50	9	3
369 Milk, full-fat							
Full-fat (Italy)	11	15 ± 8	Healthy, 7	Bread, 2 h	70 —	—	—
Full-fat (3% fat; Skånemejerier, Malmö, Sweden)	21	30 ± 4	Healthy, 10	Bread, 2 h	72 —	—	—
Full-fat (Italy)	24	34 ± 9	Type 2, 14	Bread, 2 h	70 —	—	—
Full-fat cow milk, fresh (Dairy Farmers, Australia)	31 ± 2	44 ± 2	Healthy, 10	Bread, 2 h	UO ⁴ —	—	—
Full-fat (Canada)	34 ± 6	49	Healthy, 6	Glucose, 2 h	3 —	—	—
Full-fat (USA)	40	57	Type 2, 7	Glucose, 5 h ²³	6 —	—	—
Mean of 5 studies	27 ± 4	38 ± 6	—	—	— 250	12	3
370 Fermented cow milk (ropy milk, långfil, 3% fat) (Arla, Gävle, Sweden) ⁶							
	11	15 ± 3	Healthy, 10	Bread, 2 h	72 —	—	—
371 Fermented cow milk (filmjök, 3% fat) (Skånemejerier, Malmö, Sweden) ⁶							
	11	15 ± 3	Healthy, 10	Bread, 2 h	72 —	—	—
Mean of 2 foods	11	15	—	—	— —	—	—
372 Milk, full-fat, plus bran							

Full-fat + 20 g wheat bran (Italy)	25	35 ± 11	Type 2, 14	Bread, 2 h	70	—	—	—
Full-fat + 20 g wheat bran (Italy)	28	40 ± 27	Healthy, 7	Bread, 2 h	70	—	—	—
Mean of 2 studies	27 ± 2	38 ± 3	—	—	—	250	12	3
373 Milk, skim (Canada)	32 ± 5	46	Healthy, 6	Glucose, 2 h	3	250	13	4
374 Milk, condensed, sweetened (Nestlé, Australia)	61 ± 6	87 ± 9	Healthy, 12	Glucose, 2 h	73	250	136	83
375 Milk, low-fat, chocolate, with aspartame (Lite White; Dairy Farmers, Australia)	24 ± 6	34	Healthy, 8	Bread, 2 h	2	250	15	3
376 Milk, low-fat, chocolate, with sugar (Lite White; Dairy Farmers, Australia)	34 ± 4	49	Healthy, 8	Bread, 2 h	2	250	26	9
377 Mousse, reduced-fat, prepared from commercial mousse mix with water								
Butterscotch, 1.9% fat (Nestlé, Australia)	36 ± 4	51	Healthy, 10	Glucose, 2 h	UO ⁴	50	10	4
Chocolate, 2% fat (Nestlé, Australia)	31 ± 4	44 ± 6	Healthy, 10	Glucose, 2 h	UO ⁴	50	11	3
Hazelnut, 2.4% fat (Nestlé, Australia)	36 ± 4	51	Healthy, 10	Glucose, 2 h	UO ⁴	50	10	4
Mango, 1.8% fat (Nestlé, Australia)	33 ± 5	47	Healthy, 10	Glucose, 2 h	UO ⁴	50	11	4
Mixed berry, 2.2% fat (Nestlé, Australia)	36 ± 5	51	Healthy, 10	Glucose, 2 h	UO ⁴	50	10	4

Strawberry, 2.3% fat (Nestlé, Australia)	32 ± 3	46	Healthy, 10	Glucose, 2 h	UO ⁴ 50	10	3
Mean of 6 foods	34 ± 1	48 ± 1	—	—	— 50	10	4
378 Pudding							
Instant, chocolate, made from powder and whole milk (White Wings, Australia)	47 ± 4	67	Healthy, 10	Glucose, 2 h	UO ⁴ 100	16	7
Instant, vanilla, made from powder and whole milk (White Wings, Australia)	40 ± 4	57	Healthy, 10	Glucose, 2 h	UO ⁴ 100	16	6
Mean of 2 foods	44 ± 4	62 ± 5	—	—	— 100	16	7
379 Yogurt							
Yogurt, NS (Canada)	36 ± 4	51	Healthy, 5	Glucose, 2 h	3 200	9	3
380 Low-fat yogurt							
Low-fat, fruit, aspartame (Ski; Dairy Farmers, Australia)	14 ± 4	20	Healthy, 7	Bread, 2 h	2 200	13	2
Low-fat, fruit, sugar (Ski; Dairy Farmers, Australia)	33 ± 7	47	Healthy, 8	Bread, 2 h	2 200	31	10
Low-fat (0.9%), fruit, wild strawberry (Ski d'lite; Dairy Farmers, Australia)	31 ± 14	44	Healthy, 9	Glucose, 2 h	UO ⁴ 200	30	9
381 Nonfat yogurt, sweetened with acesulfame K and Splenda							
Diet Vaalia, exotic fruits (Pauls Ltd, Australia) ⁶	23 ± 2	33	Healthy, 10	Glucose, 2 h	UO ⁴ 200	16	4

Diet Vaalia, mango (Pauls Ltd, Australia) ⁶	23 ± 2	33	Healthy, 10	Glucose, 2 h	UO ⁴ 200	14	3
Diet Vaalia, mixed berry (Pauls Ltd, Australia) ⁶	25 ± 3	36	Healthy, 10	Glucose, 2 h	UO ⁴ 200	13	3
Diet Vaalia, strawberry (Pauls Ltd, Australia) ⁶	23 ± 2	33	Healthy, 10	Glucose, 2 h	UO ⁴ 200	13	3
Diet Vaalia, vanilla (Pauls Ltd, Australia) ⁶	23 ± 2	33	Healthy, 10	Glucose, 2 h	UO ⁴ 200	13	3
Mean of 5 foods	24 ± 1	34 ± 1	—	—	— 200	14	3
382 Reduced-fat yogurt							
Reduced-fat, Vaalia, apricot and mango (Pauls Ltd, Australia) ⁶	26 ± 4	38 ± 6	Healthy, 10	Bread, 2 h	UO ⁴ 200	30	8
Reduced-fat, Vaalia, french vanilla (Pauls Ltd, Australia) ⁶	26 ± 4	38 ± 5	Healthy, 10	Bread, 2 h	UO ⁴ 200	10	3
Reduced-fat, strawberry (Extra-Lite; Pauls Ltd, Australia) ⁶	28 ± 4	40 ± 6	Healthy, 10	Bread, 2 h	UO ⁴ 200	33	9
Mean of 3 foods	27 ± 1	39 ± 1	—	—	— 200	24	7
383 Yogurt drink, reduced-fat, Vaalia, tropical passion fruit (Pauls Ltd, Australia) ⁶							
	38 ± 4	54 ± 6	Healthy, 10	Bread, 2 h	UO ⁴ 200	29	11

Soy-based dairy product alternatives

384 Soy milks (containing maltodextrin)

Soy milk, full-fat (3%), 0 mg Cal, Original (So Natural Foods, Australia) ⁶	44 ± 5	63	Healthy, 10	Glucose, 2 h	UO ⁴ 250	17	8
Soy milk, full-fat (3%), 120 mg Cal, Calciforte (So Natural Foods, Australia) ⁶	36 ± 4	51	Healthy, 10	Glucose, 2 h	UO ⁴ 250	18	6
Soy milk, reduced-fat (1.5%), 120 mg Cal, Light (So Natural Foods, Australia) ⁶	44 ± 3	63	Healthy, 10	Glucose, 2 h	UO ⁴ 250	17	8
385 Soy milk drinks							
Soy smoothie drink, banana, 1% fat (So Natural Foods, Australia) ⁶	30 ± 3	43	Healthy, 10	Glucose, 2 h	UO ⁴ 250	22	7
Soy smoothie drink, chocolate hazelnut, 1% fat (So Natural Foods, Australia) ⁶	34 ± 3	49	Healthy, 10	Glucose, 2 h	UO ⁴ 250	25	8
Mean of 2 drinks	32 ± 2	46 ± 3	—	—	— 250	23	7
Up and Go, cocoa malt flavor (soy milk, rice cereal liquid breakfast) (Sanitarium, Australia) ⁶	43 ± 5	61	Healthy, 10	Glucose, 2 h	UO ⁴ 250	26	11
Up and Go, original malt flavor (soy milk, rice cereal liquid breakfast) (Sanitarium, Australia) ⁶	46 ± 5	66	Healthy, 10	Glucose, 2 h	UO ⁴ 250	24	11
Mean of 2 drinks	45 ± 2	64 ± 3	—	—	— 250	25	11

Xpress, chocolate (soy bean, cereal and legume extract drink with fructose) (So Natural Foods, Australia) ⁶	39 ± 2	56	Healthy, 10	Glucose, 2 h	UO ⁴ 250	34	13
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386 Soy yogurt

Soy yogurt, peach and mango, 2% fat, sugar (So Natural Foods, Australia) ⁶	50 ± 3	71	Healthy, 10	Glucose, 2 h	UO ⁴ 200	26	13
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387 Tofu-based frozen dessert, chocolate with high fructose (24%) corn syrup (USA)	115 ± 14	164	Type 2, 12	Glucose, 3 h	71 50	9	10
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FRUIT AND FRUIT PRODUCTS

388 Apples, raw

Apple, NS (Denmark)	28	40 ± 11	Type 2, 8	Bread, 3 h	74 120	13	4
Apple, braeburn (New Zealand) ⁶	32 ± 4	46	Type 2, IGT, 15 ¹⁰	Glucose, 3 h	75 120	13	4
Apple, NS (Canada)	34	48	Type 2, number NS	Glucose, time NS	23 120	16	5
Apple, golden delicious (Canada)	39 ± 3	56	Healthy, 6	Glucose, 2 h	3 120	16	6
Apple, NS (USA)	40	57	Type 2, 7	Glucose, 5 h ²³	6 120	16	6
Apple, NS (Italy)	44	63 ± 3	Type 2, 7	Bread, 3 h	76 120	13	6
Mean of 6 studies	38 ± 2	52 ± 3	—	—	— 120	15	6

389 Apple juice								
Apple juice, unsweetened, reconstituted (Berrivale Orchards Ltd, Berri, Australia)	39 ± 5	55 ± 7	Healthy, 10	Bread, 2 h	UO ⁴ 250 mL	25	10	
Apple juice, unsweetened (USA)	40	57	Type 2, 7	Glucose, 5 h ²³	6 250 mL	29	12	
Apple juice, unsweetened (Allens, Toronto, Canada)	41	59 ± 8	Type 2, 6	Bread, 3 h	7 250 mL	30	12	
Mean of 3 studies	40 ± 1	57 ± 2	—	—	— 250 mL	28	11	
390 Apple, dried (Australia)	29 ± 5	41 ± 7	Healthy, 10	Bread, 2 h	UO ⁴ 60	34	10	
Apricots								
391 Apricots, raw, NS (Italy)	57	82 ± 3	Type 2, 7	Bread, 3 h	75 120	9	5	
392 Apricots, canned in light syrup (Riviera, Aliments Caneast Foods, Montreal, Canada)	64	91 ± 6	Type 2, 9	Bread, 3 h	7 120	19	12	
393 Apricots, dried								
Apricots, dried (Australia)	30 ± 7	43	Healthy, 8	Bread, 2 h	2 60	27	8	
Apricots, dried (Wasco foods, Montreal, Canada)	32	46 ± 7	Type 2, 9	Bread, 3 h	7 60	30	10	
Mean of 2 studies	31 ± 1	44 ± 2	—	—	— 60	28	9	
394 Apricot fruit bar, puréed dried apricot filling in whole-meal pastry (Mother Earth, Auckland, New Zealand)	50 ± 8	71	Healthy, 10	Glucose, 2 h	25 50	34	17	

395 Apricot fruit spread, reduced sugar (Glen Ewin Jams, Para Hills, Australia)	55 ± 7	78 ± 10	Healthy, 10	Bread, 2 h	UO ⁴ 30	13	7
396 Apricot Fruity Bitz, vitamin and mineral enriched dried fruit snack (Blackmores Ltd, Balgowlah, Australia)	42 ± 3	61	Healthy, 10	Glucose, 2 h	UO ⁴ 15	12	5
397 Banana, raw							
Banana (Canada)	46	66	Diabetic, number NS	Glucose, time NS	20 120	25	12
Banana (Italy)	58	83 ± 3	Type 2, 8	Bread, 3 h	76 120	23	13
Banana (Canada)	58	83 ± 7	Type 2, 6	Bread, 3 h	30 120	25	15
Banana (Canada)	62 ± 9	89	Healthy, 6	Glucose, 2 h	3 120	25	16
Banana (South Africa)	70 ± 5	100	Healthy, 8	Glucose, 2 h	29 120	23	16
Banana, ripe, all yellow (USA)	51	73	Type 2, 7	Glucose, 5 h ²⁴	77 120	25	13
Banana, underripe (Denmark)	30	43 ± 10	Type 2, 10	Bread, 4 h	78 120	21	6
Banana, slightly underripe, yellow with green sections (USA)	42	60	Type 2, 7	Glucose, 5 h ²⁴	77 120	25	11
Banana, overripe, yellow flecked with brown (USA)	48	69	Type 2, 7	Glucose, 5 h ²⁴	77 120	25	12
Banana, overripe (Denmark)	52	74 ± 9	Type 2, 10	Bread, 4 h	78 120	20	11
Mean of 10 studies	52 ± 4	74 ± 5	—	—	— 120	24	12

398 Banana, processed fruit fingers, Heinz Kidz (H J Heinz, Malvern, Australia)	61 ± 11	87	Healthy, 10	Glucose, 2 h	UO ⁴ 30	20	12
399 Breadfruit (<i>Artocarpus altilis</i>), raw (Australia) ⁶	68	97	Healthy, 7	Potato, 3 h ²⁵	79 120	27	18
400 Cherries, raw, NS (Canada)	22	32	Type 2, number NS	Glucose, time NS	23 120	12	3
401 Chico (<i>Zapota zapotilla coville</i>), raw (Philippines) ⁶	40	57	Type 2, 10	Bread, 3 h	80 120	29	12
402 Cranberry juice							
Cranberry juice cocktail (Ocean Spray, Australia)	52 ± 3	74	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	31	16
Cranberry juice cocktail (Ocean Spray Inc, USA)	68 ± 3	97	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	35	24
Cranberry juice drink (Ocean Spray; Gerber Ltd, Bridgewater, Somerset, UK)	56 ± 4	80	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	29	16
403 Custard apple, raw, flesh only (Australia)	54 ± 2	77 ± 3	Healthy, 12	Glucose, 2 h	73 120	19	10
404 Dates, dried (Australia)	103 ± 21	147 ± 30	Healthy, 10	Bread, 2 h	UO ⁴ 60	40	42
405 Figs, dried, tenderized, Dessert Maid brand (Ernest Hall and Sons, Sydney, Australia)	61 ± 6	87	Healthy, 10	Glucose, 2 h	UO ⁴ 60	26	16
406 Fruit Cocktail, canned (Delmonte Canadian Cannery Ltd, Hamilton, Canada)	55	79 ± 5	Type 2, 8	Bread, 3 h	7 120	16	9

407 Grapefruit, raw (Canada)	25	36	Type 2, number NS	Glucose, time NS	23 120	11	3
408 Grapefruit juice, unsweetened (Sunpac, Toronto, Canada)	48	69 ± 5	Type 2, 13	Bread, 3 h	7 250 mL	20	9
409 Grapes, raw							
Grapes, NS (Canada)	43	62	Type 2, number NS	Glucose, time NS	23 120	17	7
Grapes, NS (Italy)	49	70 ± 3	Type 2, 9	Bread, 3 h	76 120	19	9
Mean of 2 studies	46 ± 3	66 ± 4	—	—	— 120	18	8
Grapes, black, Waltham Cross (Australia)	59	84	Healthy, 11	Bread, 2 h	UO ⁴ 120	18	11
410 Kiwi fruit, raw							
Kiwi fruit, Hayward (New Zealand) ⁶	47 ± 4	68	Type 2 and IGT, 15 ¹⁰	Glucose, 3 h	75 120	12	5
Kiwi fruit (Australia) ⁶	58 ± 7	83	Healthy, 7	Bread, 2 h	2 120	12	7
Mean of 2 studies	53 ± 6	75 ± 8	—	—	— 120	12	6
411 Lychee, canned in syrup and drained, Narcissus brand (China)	79 ± 8	113 ± 11	Healthy, 12	Glucose, 2 h	73 120	20	16
412 Mango, raw							
Mango (<i>Mangifera indica</i>) (Philippines) ⁶	41	59	Type 2, 10	Bread, 3 h	80 120	20	8
Mango (<i>Mangifera indica</i>) (Australia) ⁶	51 ± 3	73	Healthy, 7	Bread, 2 h	2 120	15	8

Mango, ripe (<i>Mangifera indica</i>) (India) ¹¹	60 ± 16	86	Healthy, 12–15	Glucose, 3 h ²²	65 120	15	9
Mean of 3 studies	51 ± 5	73 ± 8	—	—	— 120	17	8
413 Mango, low-fat frozen fruit dessert (Frutia; Weis Frozen Foods, Toowong, Australia)	42 ± 3	60	Normal, 10	Glucose, 2 h	UO ⁴ 100	23	10
414 Marmalade, orange (Australia)	48 ± 9	69 ± 12	Healthy, 9	Bread, 2 h	UO ⁴ 30	20	9
415 Oranges, raw							
Oranges, NS (Denmark)	31	44 ± 13	Type 2, 8	Bread, 3 h	74 120	11	3
Oranges, NS (South Africa)	33 ± 6	47	Healthy, 6	Glucose, 2 h	29 120	10	3
Oranges, NS (Canada)	40 ± 3	57	Healthy, 6	Glucose, 2 h	3 120	11	4
Oranges, NS (Italy)	48	68 ± 2	Type 2, 8	Bread, 3 h	76 120	11	5
Oranges (Sunkist, Van Nuys, CA, USA)	48	69 ± 11	Type 2, 10	Bread, 3 h	7 120	11	5
Oranges NS (Canada)	51	73	Type 2, number NS	Glucose, time NS	23 120	11	6
Mean of 6 studies	42 ± 3	60 ± 5	—	—	— 120	11	5
416 Orange juice							
Orange Juice (Canada)	46 ± 6	66	Healthy, 6	Glucose, 2 h	3 250 mL	26	12
Orange juice, unsweetened, reconstituted concentrate, Quelch brand (Berri Ltd, Australia)	53 ± 6	76	Healthy, 8	Bread, 2 h	2 250 mL	18	9

Orange juice, reconstituted from frozen concentrate (USA)	57 ± 6	81 ± 8	Type 2, 7	Glucose, 5 h ²³	6	250 mL	26	15
Mean of 3 studies	52 ± 3	74 ± 4	—	—	—	250 mL	23	12
417 Paw paw and papaya, raw								
Paw paw (<i>Carica papaya</i>) (Australia) ⁶	56 ± 6	80	Healthy, 7	Bread, 2 h	2	120	8	5
Paw paw (papaya), ripe (India) ¹¹	60 ± 16	86	Healthy, 12–15	Glucose, 3 h ²²	65	120	29	17
Papaya (<i>Carica papaya</i>) (Philippines) ⁶	60	86	Type 2, 10	Bread, 3 h	80	120	15	9
Mean of 3 studies	59 ± 1	84 ± 2	—	—	—	120	17	10
Peaches								
418 Peach, raw								
Peach, raw (Canada)	28	40	Type 2, number NS	Glucose, time NS	23	120	13	4
Peach, raw (Italy)	56	80 ± 3	Type 2, 7	Bread, 3 h	76	120	8	5
Mean of 2 studies	42 ± 14	60 ± 20	—	—	—	120	11	5
419 Peach, canned in natural juice								
Peach, canned in natural juice (Goulburn Valley, Ardmona Foods, Mooroopna, Australia)	30 ± 4	43	Healthy, 8	Bread, 2 h	2	120	11	3
Peach, canned in natural juice (SPC Ltd, Shepparton, Australia)	45 ± 6	64	Healthy, 7–10	Bread, 2 h	8	120	11	5

Mean of 2 studies	38 ± 8	54 ± 11	—	—	—	120	11	4
420 Peach, canned in heavy syrup (Letona Foods, Hawthorn East, Australia)	58 ± 11	83	Healthy, 8	Bread, 2 h	2	120	15	9
421 Peach, canned in light syrup (Delmonte, Canadian Cannery Ltd)	52	74 ± 7	Type 2, 11	Bread, 3 h	7	120	18	9
422 Peach, canned in reduced-sugar syrup (SPC Lite; SPC Ltd, Australia)	62 ± 9	89	Healthy, 7–10	Bread, 2 h	8	120	17	11
Pears								
423 Pear, raw, NS (Canada)	33	47	Type 2, number NS	Glucose, time NS	23	120	13	4
424 Pear, winter Nellis, raw (New Zealand) ⁶	34 ± 4	49	Type 2, and IGT, 15 ¹⁰	Glucose, 3 h	75	120	12	4
425 Pear, Bartlett, raw (Canada)	41	58 ± 7	Type 2, 13	Bread, 3 h	7	120	8	3
426 Pear, raw, NS (Italy)	42	60 ± 2	Type 2, 8	Bread, 3 h	76	120	11	4
Mean of 4 studies	38 ± 2	54 ± 3	—	—	—	120	11	4
427 Pear halves, canned in reduced-sugar syrup (SPC Lite; SPC Ltd, Australia)	25 ± 6	36	Healthy, 7–10	Bread, 2 h	8	120	14	4
428 Pear halves, canned in natural juice (SPC Ltd, Australia)	43 ± 15	61	Healthy, 7–10	Bread, 2 h	8	120	13	5
429 Pear, canned in pear juice, Bartlett (Delmonte Canadian Cannery Ltd)	44	63 ± 6	Type 2, 10	Bread, 3 h	7	120	11	5

Pineapple

430 Pineapple (*Ananas comosus*), raw

Pineapple, raw (Australia) ⁶	66 ± 7	94	Healthy, 8	Bread, 2 h	2 120	10	6
Pineapple, raw (Philippines) ⁶	51	73	Type 2, 10	Bread, 3 h	80 120	16	8
Mean of 2 studies	59 ± 8	84 ± 11	—	—	— 120	13	7

431 Pineapple juice, unsweetened (Dole Packaged Foods, Toronto, Canada)

46	66 ± 3	Type 2, 13	Bread, 3 h	7 250 mL	34	15
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Plums

432 Plum, raw, NS

Plum, raw, NS (Canada)	24	34	Type 2, number NS	Glucose, time NS	23 120	14	3
Plum, raw, NS (Italy)	53	75 ± 3	Type 2, 7	Bread, 3 h	76 120	11	6
Mean of 2 studies	39 ± 15	55 ± 21	—	—	— 120	12	5

433 Prunes, pitted (Sunsweet Growers Inc, Yuba City, CA, USA)

29 ± 4	41	Healthy, 10	Glucose, 2 h	UO ⁴ 60	33	10
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434 Raisins (Canada)

64 ± 11	91	Healthy, 6	Glucose, 2 h	3 60	44	28
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435 Rockmelon/Cantaloupe, raw (Australia)⁶

65 ± 9	93	Healthy, 8	Bread, 2 h	2 120	6	4
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436 Strawberries, fresh, raw (Australia)⁶

40 ± 7	57	Healthy, 10	Glucose, 2 h	UO ⁴ 120	3	1
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437 Strawberry jam	51 ± 10	73 ± 14	Healthy, 9	Bread, 2 h	UO ⁴ 30	20	10
438 Strawberry processed fruit bars, Real Fruit Bars (Uncle Toby's, Australia)	90 ± 12	129	Healthy, 10	Glucose, 2 h	UO ⁴ 30	26	23
439 Sultanas	56 ± 11	80	Healthy, 8	Bread, 2 h	2 60	45	25
440 Tomato juice, no added sugar (Berri Ltd, Australia)	38 ± 4	54	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	9	4
441 Tropical Fruity Bitz, vitamin and mineral enriched dried fruit snack (Blackmores Ltd, Australia)	41 ± 3	58	Healthy, 10	Glucose, 2 h	UO ⁴ 15	11	5
442 Vitari, wild berry, nondairy, frozen fruit dessert (Nestlé, Australia)	59 ± 8	85 ± 11	Healthy, 10	Bread, 2 h	UO ⁴ 100	21	12
443 Watermelon, raw (Australia) ⁶	72 ± 13	103	Healthy, 8	Bread, 2 h	2 120	6	4
444 Wild Berry Fruity Bitz, vitamin- and mineral-enriched dried fruit snack (Blackmores Ltd, Australia)	35 ± 4	50	Healthy, 10	Glucose, 2 h	UO ⁴ 15	12	4

INFANT FORMULA AND WEANING FOODS

445 Formula							
Infasoy, soy-based, milk-free (Wyeth Nutritionals, Baulkham Hills, Australia) ⁶	55 ± 6	78	Healthy, 11 (adults)	Glucose, 2 h	UO ⁴ 100 mL	7	4
Karicare gold starter formula with omega							

plus LCP oils (Nutricia, Auckland, New Zealand) ⁶	35 ± 5	50	Healthy, 10 (adults)	Glucose, 2 h	UO ⁴ 100 mL	7	2
Nan-1 infant formula with iron (Nestlé, Sydney, Australia) ⁶	30 ± 6	73	Healthy, 9 (adults)	Glucose, 2 h	UO ⁴ 100 mL	8	2
S-26 infant formula (Wyeth Nutritionals, Australia) ⁶	36 ± 6	52	Healthy, 10 (adults)	Glucose, 2 h	UO ⁴ 100 mL	7	3
Weaning foods							
446 Farex baby rice (Heinz Wattie's Ltd, Malvern, Australia) ⁶	95 ± 13	136	Healthy, 11 (adults)	Glucose, 2 h	UO ⁴ 87	6	6
447 Robinsons First Tastes from 4 months (Nutricia, Wells, UK)							
Apple, apricot and banana cereal ⁶	56 ± 8	80	Healthy, 11 (adults)	Glucose, 2 h	UO ⁴ 75	13	11
Creamed porridge ⁶	59 ± 8	84	Healthy, 11 (adults)	Glucose, 2 h	UO ⁴ 75	9	5
Rice pudding ⁶	59 ± 6	84	Healthy, 11 (adults)	Glucose, 2 h	UO ⁴ 75	11	6
448 Heinz for Baby from 4 months (Heinz Wattie's Ltd, Australia)							
Chicken and noodles with vegetables (strained) ⁶	67 ± 11	96	Healthy, 10 (adults)	Glucose, 2 h	UO ⁴ 120	7	5
Sweetcorn and rice ⁶	65 ± 13	93	Healthy, 11 (adults)	Glucose, 2 h	UO ⁴ 120	15	10

LEGUMES AND NUTS

449 Baked beans								
Baked beans, canned (Canada)	40 ± 3	57	Healthy, 7	Glucose, 2 h	3	—	—	—
Baked beans, canned haricot and navy beans in tomato sauce (Libby, McNeill and Libby, Chatham, Canada)	56	80 ± 8	Type 2, 7	Bread, 3 h	81	—	—	—
Mean of 2 studies	48 ± 8	69 ± 12	—	—	—	150	15	7
450 Beans, dried, boiled								
Beans, dried, type NS (Italy)	36	52 ± 25	Healthy, 7	Bread, 2 h	70	150	30	11
Beans, dried, type NS (Italy)	20	28 ± 14	Type 2, 14	Bread, 2 h	70	150	30	6
Mean of 2 studies	29 ± 9	40 ± 12	—	—	—	150	30	9
451 Black-eyed beans and peas (Cowpeas), boiled								
Black-eyed beans (Canada)	50	71 ± 5	Type 2, 6	Bread, 3 h	30	150	30	15
Black-eyed beans (Canada)	33 ± 4	47	Healthy, 6	Glucose, 2 h	3	150	30	10
Mean of 2 studies	42 ± 9	59 ± 12	—	—	—	150	30	13
452 Butter beans								
Butter beans (South Africa)	28 ± 7	40	Healthy, 8	Glucose, 2 h	29	150	20	5

Butter beans, dried, cooked 1.25 h (South Africa)	29 ± 8	41	Type 2, 21; type 1, 8; healthy, 11	Glucose, 2 h	82 150	20	6
Butter beans (Canada)	36 ± 4	51	Healthy, 6	Glucose, 2 h	3 150	20	7
Mean of 3 studies	31 ± 3	44 ± 3	—	—	— 150	20	6
Butter beans, dried, boiled + 5 g sucrose (South Africa)	30 ± 2	43	Type 2, 21; type 1, 8; healthy, 11	Glucose, 2 h	82 150	20	6
Butter beans, dried, boiled + 10 g sucrose (South Africa)	31 ± 2	44	Type 2, 21; type 1, 8; healthy, 11	Glucose, 2 h	82 150	20	6
Butter beans, dried, boiled + 15 g sucrose (South Africa)	54 ± 4	77	Type 2, 21; type 1, 8; healthy, 11	Glucose, 2 h	82 150	20	11
453 Chickpeas (Garbanzo beans, Bengal gram), boiled							
Chickpeas (<i>Cicer arietinum</i> <i>Linn</i>), dried, soaked, boiled 35 min (Philippines)	10	14 ± 3	Healthy, 11	Bread, 1h	83 150	30	3
Chickpeas, dried, boiled (Canada)	31	44 ± 8	Type 2, 6	Bread, 3 h	81 150	30	9
Chickpeas (Canada)	33	47 ± 9	Type 2, 7	Bread, 3 h	30 150	30	10
Chickpeas (Canada)	36 ± 5	51	Healthy, 6	Glucose, 2 h	3 150	30	11
Mean of 4 studies	28 ± 6	39 ± 8	—	—	— 150	30	8
454 Chickpeas, canned in brine (Lancia-Bravo Foods Ltd, Toronto, Canada)							
	42	60 ± 7	Type 2, 11	Bread, 3 h	81 150	22	9
455 Chickpeas, curry, canned (Canasia Foods Ltd, Scarborough, Canada)							
	41	58 ± 7	Type 1 and 2, 7	Bread, 3 h	1 150	16	7

456 Haricot and navy beans								
Haricot and navy beans, pressure cooked (15 psi) 25 min (King Grains, Toronto, Canada)	29	41 ± 5	Type 2, 7	Bread, 3 h	84	150	33	9
Haricot and navy beans, dried, boiled (Canada)	30	43 ± 5	Type 2, 7	Bread, 3 h	81	150	30	9
Haricot and navy beans, boiled (Canada)	31 ± 6	44	Healthy, 6	Glucose, 2 h	3	150	30	9
Haricot and navy beans (King Grains, Canada)	39	56 ± 16	Healthy, 6	Bread, 1 h	60	150	30	12
Haricot and navy beans, pressure cooked (15 psi) 25 min (King Grains, Canada)	59	84 ± 10	Type 1, 6	Bread, 3 h	84	150	33	19
Mean of 5 studies	38 ± 6	54 ± 8	—	—	—	150	31	12
457 Kidney beans								
Kidney/white bean (<i>Phaseolus vulgaris</i> Linn), soaked, boiled 17 min (Philippines)	13	19 ± 5	Healthy, 11	Bread, 1 h	83	150	25	3
Kidney beans (<i>Phaseolus vulgaris</i>) (India)	19	27	Healthy, 6	Glucose, 2 h	54	150	25	5
Kidney beans (USA) ⁸	23	33	Type 2, 8	Glucose, 3 h	4	150	25	6
Kidney beans, dried, boiled (France)	23 ± 1	33	Type 2, 3	Glucose, 3 h	9	150	25	6
Kidney beans (<i>Phaseolus vulgaris</i> Linn), red, soaked 20 min, boiled 70 min (Sweden)	25	36 ± 6	Healthy, 10	Bread, 1.5 h	19	150	25	6

Kidney beans (Canada)	29 ± 8	41	Healthy, 6	Glucose, 2 h	3	150	25	7
Kidney beans, dried, boiled (Canada)	42	60 ± 6	Type 2, 8	Bread, 3 h	81	150	25	10
Kidney beans (Canada)	46	66 ± 7	Type 2, 7	Bread, 3 h	30	150	25	11
Mean of 8 studies	28 ± 4	39 ± 6				150	25	7
458 Kidney beans (<i>Phaseolus vulgaris</i> Linn), autoclaved	34	49 ± 5	Healthy, 10	Bread, 1.5 h	19	150	25	8
459 Kidney beans, canned (Lancia-Bravo Foods Ltd, Canada)	52	74 ± 8	Type 2, 11	Bread, 3 h	81	150	17	9
460 Kidney beans, dried, soaked 12 h, stored moist 24 h, steamed 1 h (India) ¹¹	70 ± 11	100	Healthy, 12–15	Glucose, 3 h ²²	65	150	25	17
461 Black bean (<i>Phaseolus vulgaris</i> Linn), soaked overnight, cooked 45 min (Philippines)	20	28 ± 4	Healthy, 11	Bread, 1 h	83	150	25	5
462 Lentils, type NS								
Lentils, type NS (USA)	28	40	Type 2, 8	Glucose, 3 h	4	—	—	—
Lentils, type NS (Canada)	29 ± 3	41	Healthy, 7	Glucose, 2 h	3	—	—	—
Mean of 2 studies	29 ± 1	41 ± 1	—	—	—	150	18	5
463 Lentils, green								
Lentils, green, dried, boiled (Canada)	22	31 ± 5	Type 2, 11	Bread, 3 h	81	150	18	4
Lentils, green, dried, boiled (France)	30 ± 15	43	Type 2, 3	Glucose, 3 h	9	150	18	6

Lentils, green, dried, boiled (Australia)	37 ± 3	53	Healthy, 7	Glucose, 2 h	85 150	14	5
Mean of 3 studies	30 ± 4	42 ± 6	—	—	— 150	17	5
464 Lentils, green, canned in brine (Lancia-Bravo Foods Ltd, Canada)	52	74 ± 5	Type 2, 11	Bread, 3 h	81 150	17	9
465 Lentils, red							
Lentils, red, dried, boiled (Canada)	18	25	Healthy, 3	Bread, 1 h	86 150	18	3
Lentils, red, dried, boiled (Canada)	21	30 ± 4	Type 2, 14	Bread, 3 h	22 150	18	4
Lentils, red, dried, boiled (Canada)	31	44 ± 7	Type 2, 7	Bread, 3 h	30 150	18	6
Lentils, red, dried, boiled (Canada)	32	45 ± 9	Type 1, 11	Bread, 3 h	22 150	18	6
Mean of 4 studies	26 ± 4	36 ± 5	—	—	— 150	18	5
466 Lima beans, baby, frozen, reheated in microwave oven (York, Canada Packers, Toronto, Canada)	32	46 ± 13	Type 1 and 2, 5	Bread, 3 h	1 150	30	10
467 Marrowfat peas							
Marrowfat peas, dried, boiled (USA)	31	44	Type 2, number NS	Glucose, time NS	4 —	—	—
Marrowfat peas, dried, boiled (Canada)	47 ± 3	68	Healthy, 6	Glucose, 2 h	3 —	—	—
Mean of 2 studies	39 ± 8	56 ± 12	—	—	— 150	19	7

468 Mung beans								
Mung bean (<i>Phaseolus aureus</i> Roxb.), soaked, boiled 20 min (Philippines)	31	44 ± 6	Healthy, 11	Bread, 1 h	83	150	17	5
Mung bean, fried (Australia)	53 ± 8	76 ± 11	Healthy, 10	Bread, 2 h	UO ⁴	—	—	—
Mung bean, germinated (Australia)	25 ± 4	36 ± 5	Healthy, 10	Bread, 2 h	UO ⁴	150	17	4
Mung bean, pressure cooked (Australia)	42 ± 5	60 ± 7	Healthy, 10	Bread, 2 h	UO ⁴	150	17	7
469 Peas, dried, boiled (Australia)	22	32	Type 2, number NS	Glucose, time NS	85	150	9	2
470 Pigeon Pea (<i>Cajanus cajan</i> Linn Huth.), soaked, boiled 45 min (Philippines)	22	31 ± 4	Healthy, 11	Bread, 1 h	83	150	20	4
471 Pinto beans								
Pinto beans, dried, boiled (Canada)	39	55 ± 6	Type 2, 9	Bread, 3 h	81	150	26	10
Pinto beans, canned in brine (Lancia-Bravo Foods Ltd, Canada)	45	64 ± 6	Type 2, 9	Bread, 3 h	81	150	22	10
472 Romano beans (Canada)	46	65 ± 7	Type 2, 6	Bread, 3 h	30	150	18	8
473 Soya beans								
Soya beans, dried, boiled (Canada)	15 ± 5	21	Healthy, 7	Glucose, 2 h	3	150	6	1
Soya beans, dried, boiled (Australia)	20 ± 3	29	Healthy, 7	Glucose, 2 h	85	150	6	1

Mean of 2 studies	18 ± 3	25 ± 4			150	6	1
Soya beans, canned (Canada)	14 ± 2	20	Healthy, 7	Glucose, 2 h	3 150	6	1
474 Split peas, yellow, boiled 20 min (Nupack, Mississauga, Canada)	32	45 ± 4	Type 1 and 2, 8	Bread, 3 h	1 150	19	6

MEAL-REPLACEMENT PRODUCTS

475 Hazelnut and apricot bar (Dietworks, South Yarra, Australia)	42 ± 7	60 ± 10	Healthy, 10	Bread, 2 h	UO ⁴ 50	22	9
476 L.E.A.N products (Usana Inc, Salt Lake City, UT, US)							
L.E.A.N Fibergy bar, harvest oat	45 ± 4	64	Healthy, 10	Glucose, 2 h	UO ⁴ 50	29	13
Nutrimeal, drink powder, dutch chocolate	26 ± 3	37	Healthy, 10	Glucose, 2 h	UO ⁴ 250	13	3
L.E.A.N (Life long) Nutribar, peanut crunch	30 ± 4	43	Healthy, 10	Glucose, 2 h	UO ⁴ 40	19	6
L.E.A.N (Life long) Nutribar, chocolate crunch	32 ± 4	46	Healthy, 10	Glucose, 2 h	UO ⁴ 40	19	6
Mean of 2 Nutribars	31 ± 1	45 ± 2	—	—	— 40	19	6

Worldwide Sport Nutrition reduced-carbohydrate products (Worldwide Sport Nutritional Supplements Inc, Largo, FL, US)

477 Designer chocolate, sugar-free ⁶	14 ± 3	20	Healthy, 10	Glucose, 2 h	UO ⁴ 35	22	3
478 Burn-it bars							

Chocolate deluxe ⁶	29 ± 3	41	Healthy, 10	Glucose, 2 h	UO ⁴ 50	8	2
Peanut butter ⁶	23 ± 3	33	Healthy, 10	Glucose, 2 h	UO ⁴ 50	6	1
479 Pure-protein bars							
Chewy choc-chip ⁶	30 ± 4	43	Healthy, 10	Glucose, 2 h	UO ⁴ 80	14	4
Chocolate deluxe ⁶	38 ± 4	54	Healthy, 10	Glucose, 2 h	UO ⁴ 80	13	5
Peanut butter ⁶	22 ± 4	31	Healthy, 10	Glucose, 2 h	UO ⁴ 80	9	2
Strawberry shortcake ⁶	43 ± 4	61	Healthy, 10	Glucose, 2 h	UO ⁴ 80	13	6
White chocolate mousse ⁶	40 ± 4	57	Healthy, 10	Glucose, 2 h	UO ⁴ 80	15	6
480 Pure-protein cookies							
Choc-chip cookie dough ⁶	25 ± 3	36	Healthy, 10	Glucose, 2 h	UO ⁴ 55	11	3
Coconut ⁶	42 ± 5	60	Healthy, 10	Glucose, 2 h	UO ⁴ 55	9	4
Peanut butter ⁶	37 ± 7	53	Healthy, 10	Glucose, 2 h	UO ⁴ 55	9	3
481 Ultra pure-protein shakes							
Cappuccino ⁶	47 ± 6	67	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	1	1
Frosty chocolate ⁶	37 ± 6	53	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	3	1
Strawberry shortcake ⁶	42 ± 4	60	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	1	1
Vanilla ice cream ⁶	32 ± 5	46	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	3	1

**MIXED MEALS AND
CONVENIENCE FOODS**

482 Chicken nuggets, frozen, reheated in microwave oven 5 min (Savings, Grocery Holdings, Tooronga, Australia)	46 ± 4	66	Healthy, 10	Glucose, 2 h	UO ⁴ 100	16	7
483 Fish fingers (Canada)	38 ± 6	54	Healthy, 5	Glucose, 2 h	3 100	19	7
484 Greek lentil stew with a bread roll, homemade (Australia)	40 ± 5	57	Healthy, 8	Glucose, 2 h	87 360	37	15
485 Kugel (Polish dish containing egg noodles, sugar, cheese, and raisins) (Israel)	65 ± 6	93	Type 2, 7; healthy, 7	Glucose, 3 h ¹⁴	88 150	48	31
486 Lean Cuisine, French style chicken with rice, reheated (Nestlé, Australia) ⁶	36 ± 6	51	Healthy, 8	Glucose, 2 h	UO ⁴ 400	68	24
487 Pies, beef, party size (Farmland Grocery Holdings, Australia)	45 ± 6	64	Healthy, 9	Glucose, 2 h	UO ⁴ 100	27	12
488 Pizza							
Pizza, cheese (Pillsbury Canada Ltd, Toronto, Canada)	60	86 ± 5	Type 1 and 2, 12	White bread, 3 h	1 100	27	16
Pizza, plain baked dough, served with parmesan cheese and tomato sauce (Italy)	80	114 ± 14	Type 2, 17	White bread, 3 h	31 100	27	22
Pizza, Super Supreme, pan (11.4% fat) (Pizza Hut, Sydney, Australia)	36 ± 6	51	Healthy, 10	Glucose, 2 h	UO ⁴ 100	24	9
Pizza, Super Supreme, thin and crispy (13.2% fat) (Pizza Hut, Australia)	30 ± 4	43	Healthy, 10	Glucose, 2 h	UO ⁴ 100	22	7

Pizza, Vegetarian Supreme, thin and crispy (7.8% fat) (Pizza Hut, Australia) ⁶	49 ± 6	70	Healthy, 10	Glucose, 2 h	UO ⁴ 100	25	12
489 Sausages, NS (Canada)	28 ± 6	40	Healthy, 5	Glucose, 2 h	3 100	3	1
490 Sirloin chop with mixed vegetables and mashed potato, homemade (Australia)	66 ± 12	94	Healthy, 8	Glucose, 2 h	87 360	53	35
491 Spaghetti bolognese, homemade (Australia)	52 ± 9	74	Healthy, 8	Glucose, 2 h	87 360	48	25
492 Stir-fried vegetables with chicken and boiled white rice, homemade (Australia)	73 ± 17	104	Healthy, 8	Glucose, 2 h	87 360	75	55
493 Sushi							
Sushi, salmon (I Love Sushi, Sydney, Australia) ⁶	48 ± 8	69	Healthy, 10	Glucose, 2 h	UO ⁴ 100	36	17
Sushi, roasted sea algae, vinegar and rice (Japan)	55	79	Healthy, 9	Rice, 2 h ²⁶	89 100	37	20
Mean of 2 studies	52 ± 4	74 ± 5	—	—	— 100	37	19
494 White boiled rice, grilled beefburger, cheese, and butter (France)	27	38	Type 2, 16	Glucose, 3 h ¹⁴	53 440	50	14
White boiled rice, grilled beefburger, cheese, and butter (France)	22	32	Type 2, 14	Glucose, 3 h ¹⁴	53 440	50	11
Mean of 2 groups of subjects	25 ± 2	35 ± 3	—	—	— 440	50	13

White bread with toppings

495 White-wheat-flour bread, butter, cheese, regular cow milk, and fresh cucumber (Sweden) ⁶	55	79 ± 10	Healthy, 10	Bread, 2 h	72 200	68	38
496 White-wheat-flour bread, butter, yogurt, and pickled cucumber (Sweden) ⁶	39	55 ± 7	Healthy, 10	Bread, 2 h	72 200	28	11
497 White bread with butter (Canada)	59	84 ± 10	Type 2, 6	Bread, 3 h	84 100	48	29
498 White bread with skim milk cheese (Canada)	55	79 ± 10	Type 2, 6	Bread, 3 h	84 100	47	26
499 White bread with butter and skim milk cheese (Canada)	62	89 ± 9	Type 2, 5	Bread, 3 h	84 100	38	23
500 White and whole-meal wheat bread with peanut butter (Canada)	51	73 ± 6	Type 1, 6	Bread, 3 h	84 100	44	23
White and whole-meal wheat bread with peanut butter (Canada)	67	95 ± 9	Type 1, 6	Bread, 3 h	84 100	44	30
Mean of 2 studies	59 ± 8	84 ± 11	—	—	— 100	44	26

NUTRITIONAL-SUPPORT PRODUCTS

501 Choice _{dm} , vanilla (Mead Johnson Nutritionals, Evansville, IN, US)	23 ± 4	33	Healthy, 7–10	Bread, 2 h	8 237 mL	24	6
502 Enercal Plus, made from powder (Wyeth-Ayerst International Inc, Madison, NJ, US)	61 ± 13	87	Healthy, 12	Glucose, 5 h ²⁷	90 237 mL	40	19

503 Ensure (Abbott Australasia, Kurnell, Australia)	50 ± 8	71	Healthy, 7–10	Bread, 2 h	8 237 mL	40	19
504 Ensure, vanilla (Abbott Australasia)	48 ± 3	69	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	34	16
505 Ensure bar, chocolate fudge brownie (Abbott Australasia)	43 ± 3	61	Healthy, 10	Glucose, 2 h	UO ⁴ 38	20	8
506 Ensure Plus, vanilla (Abbott Australasia)	40 ± 4	57	Healthy, 10	Glucose, 2 h	UO ⁴ 237 mL	47	19
507 Ensure Pudding, old-fashioned vanilla (Abbott Laboratories Inc, Ashland, OH, USA)	36 ± 4	51	Healthy, 10	Glucose, 2 h	UO ⁴ 113	26	9
508 Glucerna, vanilla (Abbott Laboratories Inc, USA) ⁶	31 ± 2	44	Healthy, 10	Glucose, 2 h	UO ⁴ 237 mL	23	7
509 Jevity (Abbott Australasia)	48 ± 3	69	Healthy, 10	Glucose, 2 h	UO ⁴ 237 mL	36	17
510 Resource Diabetic, French vanilla (Novartis Nutrition Corp, Young America, MN, USA) ⁶	34 ± 3	49	Healthy, 10	Glucose, 2 h	UO ⁴ 237 mL	23	8
511 Resource Diabetic, Swiss chocolate (Novartis, Auckland, New Zealand)	16 ± 4	23	Healthy, 11	Glucose, 2 h	25 237 mL	41	19
512 Resource thickened orange juice, honey consistency (Novartis, New Zealand)	47 ± 9	67	Healthy, 11	Glucose, 2 h	25 237 mL	39	21
513 Resource thickened orange juice, nectar consistency (Novartis, New Zealand)	54 ± 7	77	Healthy, 11	Glucose, 2 h	25 237 mL	36	14

514 Resource fruit beverage, peach flavor (Novartis, New Zealand)	40 ± 8	57	Healthy, 11	Glucose, 2 h	25 237 mL	41	13
515 Sustagen, Dutch Chocolate (Mead Johnson, Bristol Myers Squibb, Rydalmere, Australia)	31 ± 4	44 ± 6	Healthy, 10	Bread, 2 h	UO ⁴ 250 mL	41	13
516 Sustagen Hospital with extra fiber, drink made from powdered mix (Mead Johnson, Australia)	33 ± 4	47 ± 6	Healthy, 10	Bread, 2 h	UO ⁴ 250 mL	44	15
517 Sustagen Instant Pudding, vanilla, made from powdered mix (Mead Johnson, Australia)	27 ± 3	38 ± 4	Healthy, 10	Bread, 2 h	UO ⁴ 250	47	13
518 Ultracal with fiber (Mead Johnson, USA)	40	55 ± 16	Healthy, 8	Bread, 2 h	UO ⁴ 237 mL	29	12
PASTA AND NOODLES							
519 Capellini (Primo Foods Ltd, Toronto, Canada)	45	64 ± 8	Type 1 and 2, 8	Bread, 3 h	1 180	45	20
520 Corn pasta, gluten-free (Orgran Natural Foods, Carrum Downs, Australia)	78 ± 10	111	Healthy, 10	Glucose, 2 h	UO ⁴ 180	42	32
521 Fettucine, egg							
Fettucine, egg	32 ± 4	46	Healthy, 7	Glucose, 2 h	91 180	46	15
Fettucine, egg (Mother Earth Fine Foods, Rowville, Australia)	47 ± 6	67	Healthy, 14	Glucose, 2 h	25 180	46	22
Mean of 2 studies	40 ± 8	57 ± 11	—	—	— 180	46	18

522 Gluten-free pasta, maize starch, boiled 8 min (UK)	54	77 ± 18	Healthy, 8	Bread, 2 h	18 180	42	22
523 Gnocchi, NS (Latina, Pillsbury Australia Ltd, Mt Waverley, Australia)	68 ± 9	97	Healthy, 8	Bread, 2 h	13 180	48	33
524 Instant noodles							
Instant two-minute noodles, Maggi (Nestlé, Australia)	46 ± 5	66	Healthy, 8	Bread, 2 h	13 —	—	—
Instant two-minute noodles, Maggi (Nestlé, New Zealand)	48 ± 8	69	Healthy, 15	Glucose, 2 h	25 —	—	—
Instant noodles (Mr Noodle, Vancouver, Canada)	47	67 ± 8	Type 1 and 2, 10	Bread, 3 h	1 —	—	—
Mean of 3 studies	47 ± 1	67 ± 2	—	—	— 180	40	19
525 Linguine							
Thick, durum wheat, white, fresh (Sweden)	43	62 ± 11	Healthy, 10	Bread, 1.5 h	19 180	48	21
Thick, fresh, durum wheat flour, 0.6% (by wt) monoglycerides, boiled 8 min (Sweden)	48	68 ± 13	Healthy, 9	Bread, 2 h	92 180	48	23
Mean of 2 studies	46 ± 3	65 ± 3	—	—	— 180	48	22
Thin, durum wheat (Sweden)	49	70 ± 9	Healthy, 10	Bread, 1.5 h	19 180	48	23
Thin, fresh, durum wheat flour, 0.6% (by wt) monoglycerides, boiled 3 min (Sweden)	61	87 ± 13	Healthy, 9	Bread, 2 h	92 180	48	29
Thin, fresh, durum wheat with 39% (by wt) egg, (Sweden)	45	64 ± 11	Healthy, 10	Bread, 1.5 h	19 180	41	18

Thin, fresh, with 0.6% (by wt) monoglycerides and 30% (by wt) egg, boiled 3 min (Sweden)	53	76 ± 13	Healthy, 9	Bread, 2 h	92	180	41	22
Mean of 4 studies	52 ± 3	74 ± 5				180	45	23
526 Mung bean noodles								
Lungkow bean-thread noodles (National Cereals, Oils and Foodstuffs, Qingdao and Guangdong, China)	26	37 ± 6	Type 1 and 2, 9	Bread, 3 h	1	180	45	12
Mung bean noodles (Longkou bean thread), dried, boiled (Yantai cereals, China)	39 ± 9	56 ± 13	Healthy, 12	Glucose, 2 h	73	180	45	18
Mean of 2 studies	33 ± 7	47 ± 10	—	—	—	—	—	—
527 Macaroni								
Macaroni, plain, boiled 5 min (Lancia-Bravo Foods Ltd, Canada)	45	64 ± 8	Type 1 and 2, 13	Bread, 3 h	93	180	49	22
Macaroni, plain, boiled (Turkey)	48	69	Type 2, 52; type 1, 31	Glucose, 2 h	32	180	49	23
Mean of 2 studies	47 ± 2	67 ± 3	—	—	—	180	48	23
Macaroni and cheese, boxed (Kraft General Foods Canada Inc, Don Mills, Canada)	64	92 ± 5	Type 1 and 2, 9	Bread, 3 h	1	180	51	32
528 Ravioli, durum wheat flour, meat-filled, boiled (Australia)	39 ± 1	56	Healthy, 6	Glucose, 2 h	91	180	38	15
529 Rice noodles and pasta								

Rice noodles, dried, boiled (Thai World, Bangkok, Thailand)	61 ± 6	87 ± 9	Healthy, 12	Glucose, 2 h	3 180	39	23
Rice noodles, freshly made, boiled (Australia)	40 ± 4	57 ± 6	Healthy, 12	Glucose, 2 h	73 180	39	15
Rice pasta, brown, boiled 16 min (Rice Grower's Co-op, Australia)	92 ± 8	131	Healthy, 6	Bread, 2 h	48 180	38	35
Rice and maize pasta, gluten- free, Ris'O'Mais (Orgran Foods, Australia)	76 ± 6	109	Healthy, 9	Glucose, 2 h	UO ⁴ 180	49	37
Rice vermicelli, Kongmoon (National Cereals, Oils and Foodstuffs, China)	58	83 ± 5	Type 1 and 2, 9	Bread, 3 h	1 180	39	22
Spaghetti							
530 Spaghetti, gluten-free, rice and split pea, canned in tomato sauce (Orgran Foods, Australia)	68 ± 9	97	Healthy, 10	Glucose, 2 h	UO ⁴ 220	27	19
531 Spaghetti, protein enriched, boiled 7 min (Catelli Plus; Catelli Ltd, Montreal, Canada)	27	38 ± 4	Type 1 and 2, 13	Bread, 3 h	93 180	52	14
532 Spaghetti, white, boiled 5 min							
Boiled 5 min (Lancia-Bravo Foods Ltd, Canada)	32	45 ± 6	Type 1 and 2, 13	Bread, 3 h	93 180	48	15
Boiled 5 min (Canada)	34	49 ± 7	Type 2, 11	Bread, 3 h	22 180	48	16
Boiled 5 min (Canada)	40	57 ± 8	Type 1, 6	Bread, 3 h	93 180	48	19
Boiled 5 min (Middle East)	44	63 ± 9	Type 1, 7	Bread, 3 h	22 180	48	21
Mean of 4 studies	38 ± 3	54 ± 4	—	—	— 180	48	18

533 Spaghetti, white or type NS,
boiled 10–15 min

White, durum wheat, boiled 10 min in salty water (Barilla, Parma, Italy) ¹²	58	83 ± 16	Healthy, 8	Bread, 2.8 h	37 180	48	28
White, durum wheat flour, boiled 12 min (Starhushälls; Kungsörnen AB, Järna, Sweden)	47	67 ± 10	Healthy, 10	Bread, 2 h	19 180	48	23
White, durum wheat flour, 0.6% (by wt) monoglycerides, boiled 12 min (Sweden)	53	76 ± 12	Healthy, 9	Bread, 2 h	92 180	48	25
Boiled 15 min (Lancia-Bravo Foods Ltd, Canada)	32	46 ± 5	Type 1 and 2, 13	Bread, 3 h	93 180	48	15
Boiled 15 min (Lancia-Bravo Foods Ltd, Canada)	36	52 ± 7	Type 2, 7	Bread, 3 h	22 180	48	17
Boiled 15 min (Canada)	41	59 ± 11	Type 1, 4	Bread, 3 h	22 180	48	20
White, boiled 15 min in salted water (Unico, Concord, Canada)	44 ± 3	63	Healthy, 10	Glucose, 2 h	UO ⁴ 180	48	21
Mean of 7 studies	44 ± 3	64 ± 5	—	—	— 180	48	21

534 Spaghetti, white or type NS,
boiled 20 min

White, durum wheat, boiled 20 min (Australia)	58 ± 7	83	Healthy, 6	Bread, 2 h	48 180	44	26
Durum wheat, boiled 20 min (USA)	64 ± 15	91	Type 2, 3	Glucose, 3 h	9 180	43	27
Mean of 2 studies	61 ± 3	87 ± 4	—	—	— 180	44	27

535 Spaghetti, white, boiled								
White (Denmark)	33	47 ± 9	Type 2, 6	Bread, 3 h	94	180	48	16
White, durum wheat (Catelli Ltd, Montreal Canada)	34	48 ± 5	Type 2, 9	Bread, 3 h	38	180	48	16
White (Australia)	38	54 ± 13	Type 2, 10	Bread, 3 h	41	180	44	17
White (Canada)	42	60 ± 9	Type 2, 6	Bread, 3 h	30	180	48	20
White (Canada)	48	68	Diabetic, number NS	Glucose, time NS	20	180	48	23
White (Vetta, Greens Foods, Glendenning, Australia)	49 ± 7	70 ± 10	Healthy, 12	Bread, 2 h	UO ⁴	180	44	22
White (Canada)	50 ± 8	71	Healthy, 6	Glucose, 2 h	3	180	48	24
Mean of 7 studies	42 ± 3	60 ± 4	—	—	—	180	47	20
536 Spaghetti, white, durum wheat semolina (Panzani, Marseilles, France)								
Boiled in 0.7% salted water for 11 min	59 ± 15	84	Healthy, 12	Glucose, 3 h	95	180	48	28
Boiled in 0.7% salted water for 16.5 min	65 ± 15	93	Healthy, 12	Glucose, 3 h	95	180	48	31
Boiled in 0.7% salted water for 22 min	46 ± 10	66	Healthy, 12	Glucose, 3 h	95	180	48	22
Mean of 3 cooking times	57 ± 6	81 ± 8	—	—	—	180	48	27
537 Spaghetti, whole meal, boiled								
Whole meal (USA)	32	46 ± 7	Type 2, 10	Bread, 3 h	41	180	44	14

Whole meal (Canada)	42 ± 4	60	Healthy, 6	Glucose, 2 h	3 180	40	17
Mean of 2 studies	37 ± 5	53 ± 7	—	—	— 180	42	16
538 Spirali, durum wheat, white, boiled to al denté texture (Australia)	43 ± 10	61	Healthy, 8	Glucose, 2 h	91 180	44	19
539 Split pea and soya pasta shells, gluten-free (Orgran Foods, Australia)	29 ± 6	41	Healthy, 9	Glucose, 2 h	UO ⁴ 180	31	9
540 Star Pastina, white, boiled 5 min (Lancia-Bravo Foods Ltd, Canada)	38	54 ± 6	Type 1 and 2, 13	Bread, 3 h	93 180	48	18
541 Tortellini, cheese (Stouffer; Nestlé, Don Mills, Canada)	50	71 ± 5	Type 1 and 2, 8	Bread, 3 h	1 180	21	10
542 Udon noodles, plain, reheated 5 min (Fantastic, Windsor Gardens, Australia) ⁶	62 ± 8	43	Healthy, 10	Glucose, 2 h	UO ⁴ 180	48	30
543 Vermicelli, white, boiled (Australia)	35 ± 7	50	Healthy, 7	Glucose, 2 h	91 180	44	16
SNACK FOODS AND CONFECTIONERY							
544 Burger Rings, barbeque-flavored (Smith's Snack Food Co, Chatswood, Australia)	90 ± 16	129	Healthy, 10	Glucose, 2 h	UO ⁴ 50	31	28
545 Chocolate, milk, plain							
Chocolate, milk, plain with sucrose (Belgium) ⁶	34 ± 5	49	Healthy, 8	Glucose, 3 h	96 50	22	7
Chocolate, milk (Cadbury's Confectionery, Ringwood, Australia)	49 ± 6	70	Healthy, 8	Bread, 2 h	2 50	30	14

Chocolate, milk (Dove; Mars Confectionery, Ballarat, Australia)	45 ± 8	64	Healthy, 10–12	Bread, 2 h	17	50	30	13
Chocolate, milk (Nestlé, Sydney, Australia)	42 ± 8	60	Healthy, 10	Glucose, 2 h	UO ⁴	50	31	13
Mean of 4 studies	43 ± 3	61 ± 4	—	—	—	50	28	12
Chocolate, milk, plain, low-sugar with maltitol (Belgium) ⁶	35 ± 16	50	Healthy, 8	Glucose, 3 h	96	50	22	8
546 Chocolate, white (Milky Bar; Nestlé, Australia)	44 ± 6	63	Healthy, 10	Glucose, 2 h	UO ⁴	50	29	13
547 Corn chips								
Corn chips, plain, salted (Doritos original; Smith's Snack Food Co, Australia, 1998)	42 ± 4	60 ± 5	Healthy, 10	Bread, 2 h	UO ⁴	50	25	11
Corn chips, plain, salted (Doritos original; Smith's Snack Food Co, Australia, 1985)	72	103	Healthy, 6	Glucose, 2 h	47	50	25	18
Nachips (Old El Paso Foods Co, Canada)	74	106 ± 8	Type 1 and 2, 9	Glucose, 2 h	1	50	29	21
Mean of 3 studies	63 ± 10	90 ± 15	—	—	—	50	26	17
548 Fruit bars								
Apricot filled fruit bar (puréed dried apricot filling in whole-meal pastry) (Mother Earth, New Zealand)	50 ± 8	71	Healthy, 10	Glucose, 2 h	25	50	34	17
Heinz Kidz Fruit Fingers, banana (HJ Heinz, Australia)	61 ± 11	87	Healthy, 10	Glucose, 2 h	UO ⁴	30	20	12

Real Fruit Bars, strawberry (Uncle Toby's, Wahgunyah, Australia)	90 ± 12	129	Healthy, 10	Glucose, 2 h	UO ⁴ 30	26	23
Roll-Ups, fruit leather-type snack (Uncle Toby's, Australia)	99 ± 12	142 ± 18	Healthy, 10	Bread, 2 h	UO ⁴ 30	25	24
549 Fruity Bitz, vitamin- and mineral-enriched dried fruit snacks							
Fruity Bitz, apricot (Blackmores Ltd, Australia)	42 ± 3	61	Healthy, 10	Glucose, 2 h	UO ⁴ 15	12	5
Fruity Bitz, berry (Blackmores Ltd, Australia)	35 ± 4	50	Healthy, 10	Glucose, 2 h	UO ⁴ 15	12	4
Fruity Bitz, tropical (Blackmores Ltd, Australia)	41 ± 3	58	Healthy, 10	Glucose, 2 h	UO ⁴ 15	11	5
Mean of 3 flavors	39 ± 2	56 ± 3	—	—	— 15	12	4
550 Jelly beans							
Jelly beans, assorted colors (Allen's; Nestlé, Australia)	80 ± 8	114	Healthy, 8	Bread, 2 h	2 —	—	—
Jelly beans, assorted colors (Savings, Grocery Holdings, Tooronga, Australia)	76 ± 6	109	Healthy, 12	Bread, 2 h	UO ⁴ —	—	—
Mean of 2 studies	78 ± 2	112 ± 3	—	—	— 30	28	22
551 Kudos Whole-Grain Bars, chocolate chip (M & M/Mars, Hackettstown, NJ, USA)	62 ± 8	89	Healthy, 10–12	Bread, 2 h	17 50	32	20
552 Life Savers, peppermint candy (Nestlé, Australia)	70 ± 6	100	Healthy, 8	Bread, 2 h	2 30	30	21

553 M & M's, peanut (Mars Confectionery, Australia)	33 ± 3	47	Healthy, 10–12	Bread, 2 h	17	30	17	6
554 Mars Bar								
Mars Bar (Mars Confectionery, Australia)	62 ± 8	89	Healthy, 10–12	Bread, 2 h	17	60	40	25
Mars Bar (M & M/Mars, USA)	68 ± 12	97	Healthy, 6	Glucose, 2 h	3	60	40	27
Mean of 2 studies	65 ± 3	93 ± 4	—	—	—	60	40	26
555 Muesli bar containing dried fruit (Uncle Toby's, Australia)	61 ± 7	87	Healthy, 7	Bread, 2 h	2	30	21	13
556 Nougat, Jijona (La Fama, Spain)	32	46	Healthy, 7	Bread, 2 h	97	30	12	4
557 Nutella, chocolate hazelnut spread (Ferrero Australia, Milson's Point, Australia)	33 ± 4	47	Healthy, 10–12	Bread, 2 h	17	20	12	4
Nuts								
558 Cashew nuts, salted (Coles Supermarkets, Australia) ⁶	22 ± 5	31	Healthy, 10	Glucose, 2 h	UO ⁴	50	13	3
559 Peanuts								
Peanuts, crushed (South Africa) ⁶	7 ± 4	10	Healthy, 6	Glucose, 2 h	29	50	4	0
Peanuts (Canada) ⁶	13 ± 6	19	Healthy, 5	Glucose, 2 h	3	50	7	1
Peanuts (Mexico) ⁶	23	33 ± 17	Healthy, 21; type 2, 27	Bread, 3 h	98	50	7	2
Mean of 3 studies	14 ± 8	21 ± 12	—	—	—	50	6	1

560 Popcorn								
Popcorn, plain, cooked in microwave oven (Green's Foods, Australia)	55 ± 7	79	Healthy, 8	Bread, 2 h	13	20	11	6
Popcorn, plain, cooked in microwave oven (Uncle Toby's, Australia)	89	127	Healthy, 12	Bread, 2 h	UO ⁴	20	11	10
Mean of 2 studies	72 ± 17	103 ± 24	—	—	—	20	11	8
561 Pop Tarts, double chocolate (Kellogg's, Australia)								
	70 ± 2	100	Healthy, 10	Glucose, 2 h	UO ⁴	50	35	24
562 Potato crisps								
Potato crisps, plain, salted (Arnott's, Homebush, Australia)	57	81	Healthy, 6	Glucose, 2 h	47	50	18	10
Potato crisps, plain, salted (Canada)	51 ± 7	73	Healthy, 7	Glucose, 2 h	3	50	24	12
Mean of 2 studies	54 ± 3	77 ± 4				50	21	11
563 Pretzels, oven-baked, traditional wheat flavor (Parker's, Smith's Snack Food Co, Australia)								
	83 ± 9	119	Healthy, 8	Bread, 2 h	13	30	20	16
564 Skittles (Mars Confectionery, Australia)								
	70 ± 5	100	Healthy, 10–12	Bread, 2 h	17	50	45	32
565 Snack bars								
Snack bar, apple cinnamon (Con Agra Inc, USA)	40 ± 8	57 ± 11	Healthy, 10	Bread, 2 h	UO ⁴	50	29	12
Snack bar, peanut butter and choc-chip (Con Agra Inc, USA)	37 ± 6	53 ± 9	Healthy, 10	Bread, 2 h	UO ⁴	50	27	10

566 Snickers Bar								
Snickers Bar (Mars Confectionery, Australia)	41 ± 5	59	Healthy, 10–12	Bread, 2 h	17	60	36	15
Snickers Bar (M & M/Mars, USA)	68	97	Healthy, 12	Bread, 2 h	99	60	34	23
Mean of 2 studies	55 ± 14	78 ± 19				60	35	19
567 Twisties, cheese-flavored, extruded snack, rice and corn (Smith's Snackfood Co, Australia)								
	74 ± 5	106	Healthy, 10	Glucose, 2 h	UO ⁴	50	29	22
568 Twix Cookie Bar, caramel (M & M/Mars, USA)								
	44 ± 6	63	Healthy, 10–12	Bread, 2 h	17	60	39	17
SPORTS BARS								
569 Power Bar (Powerfood Inc, Berkeley, CA, USA)								
Power Bar, chocolate	58 ± 5	83 ± 7	Healthy, 10	Bread, 2 h	17	—	—	—
Power Bar, chocolate	53	75	Healthy, 12	Bread, 2 h	99	—	—	—
Mean of 2 studies	56 ± 3	79 ± 4				65	42	24
570 Ironman PR bar, chocolate (PR Nutrition, San Diego, CA, USA)								
	39	55	Healthy, 12	Bread, 2 h	99	65	26	10
SOUPS								
571 Black bean (Wil-Pack Foods, San Pedro, CA, USA)								
	64	92 ± 9	Type 1 and 2, 6	Bread, 3 h	1	250 mL	27	17
572 Green pea, canned (Campbell Soup Co Ltd, Toronto, Canada)								
	66	94 ± 7	Type 1 and 2, 10	Bread, 3 h	1	250 mL	41	27

573 Lentil, canned (Unico, Canada)	44	63 ± 6	Type 1 and 2, 9	Bread, 3 h	1 250 mL	21	9
574 Minestrone, Traditional, Country Ladle (Campbell's Soups, Homebush, Australia) ⁶	39 ± 3	56	Healthy, 10	Glucose, 2 h	UO ⁴ 250 mL	18	7
575 Noodle soup (traditional Turkish soup with stock and noodles)	1	1	Healthy, 31;	Glucose, 2 h	32 250 mL	9	0
576 Split pea (Wil-Pak Foods, USA)	60	86 ± 12	Type 1 and 2, 5	Bread, 3 h	1 250 mL	27	16
577 Tarhana soup (traditional Turkish soup with wheat flour, yogurt, tomato, and peppers)	20	29	Healthy, 31; type 2, 52	Glucose, 2 h	32		
578 Tomato soup (Canada)	38 ± 9	54	Healthy, 5	Glucose, 2 h	3 250 mL	17	6

SUGARS AND SUGAR ALCOHOLS

579 Blue agave cactus nectar, high-fructose

Organic agave cactus nectar, light, 90% fructose (Western Commerce Corp, City of Industry, CA, USA)⁶

11 ± 1	16 ± 1	Healthy, 9	Bread, 2 h	UO ⁴ 10	8	1
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Organic agave cactus nectar, light, 97% fructose (Western Commerce Corp, USA)⁶

10 ± 1	14 ± 1	Healthy, 9	Bread, 2 h	UO ⁴ 10	8	1
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580 Fructose

25-g portion (Sweeten Less, Maximum Nutrition Inc, Toronto, Canada) ⁶	11	16 ± 5	Healthy, 8	Bread, 2 h	100	—	—	—
50-g portion (Sweeten Less, Maximum Nutrition Inc, Canada)	12	16 ± 6	Healthy, 8	Bread, 2 h	100	—	—	—
50-g portion	20 ± 5	29	Healthy, 5	Glucose, 2 h	3	—	—	—
50-g portion	21	30	Type 2, number NS	Glucose, time NS	23	—	—	—
50-g portion (Sigma Chemical Company, St Louis, MO, USA)	24	34	Type 2, 7	Glucose, 5 h ²³	6	—	—	—
25-g portion fed with oats ²⁸	25	35 ± 12	Type 2, 6	Bread, 3 h	49	—	—	—
Mean of 6 studies	19 ± 2	27 ± 4	—	—	—	10	10	2
581 Glucose								
50-g portion (dextrose)	85	121	Type 2, 20	Bread, 3 h	52	—	—	—
25-g portion, fed with oats ²⁸	92	131 ± 13	Type 2, 6	Bread, 3 h	49	—	—	—
50-g portion	93	132	Type 2, 5; IGT, 6 ¹⁰	Bread, 3 h	28	—	—	—
50-g portion (dextrose)	96	137	Healthy, 16	Bread, 3 h	51	—	—	—
50-g portion	96	137	Diabetic, number NS	Glucose, time NS	20	—	—	—
50-g portion (Bio-Health; Dawson Traders Ltd, Toronto, Canada)	96	137 ± 22	Healthy, 8	Bread, 2 h	100	—	—	—

46 g Glucose + 15 g apple and orange fiber extract (FITA, Chatswood, Australia) (total carbohydrate content of drink = 50 g)	79 ± 3	113	Healthy, 10	Glucose, 2 h	UO ⁴ 10	8	6
50 g Glucose + 14.5 g guar gum	62	88	Healthy, 10	Glucose, 2 h	102 10	10	6
50 g Glucose + 14.5 g oat gum (78% oat β-glucan)	57	82	Healthy, 9	Glucose, 2 h	102 10	10	6
100 g Glucose + 20 g acacia gum ⁷	85	121	Healthy, 12	Glucose, 2.5 h ¹²	103 10	10	9
585 Glucose consumed with a mixed meal							
30 g glucose with 150 g grilled beefburger,	55	79	Type 2, 16	Glucose, 3 h ¹⁴	53 —	—	—
30 g cheese, and 10 g butter (total meal contained 50 g carbohydrate) (France)			(sulfonylureas not taken)				
30 g glucose with 150 g grilled beefburger,	57	81	Type 2, 14	Glucose, 3 h ¹⁴	53 —	—	—
30 g cheese, and 10 g butter (total meal contained 50 g carbohydrate) (France)			(sulfonylureas taken)				
Mean of 2 groups of subjects	56 ± 1	80 ± 1	—	—	— 250	35	20
586 Honey							
Locust honey (Romania) ⁶	32	46	Type 2, 32	Glucose, 2 h	104 25	21	7

Yellow box, 46% fructose (Australia) ⁶	35 ± 4	50	Healthy, 10	Glucose, 2 h	UO ⁴ 25	18	6
Stringy bark, 52% fructose (Australia) ⁶	44 ± 4	63	Healthy, 9	Glucose, 2 h	UO ⁴ 25	21	9
Red gum, 35% fructose (Australia) ⁶	46 ± 3	66	Healthy, 9	Glucose, 2 h	UO ⁴ 25	18	8
Iron bark, 34% fructose (Australia) ⁶	48 ± 3	69	Healthy, 10	Glucose, 2 h	UO ⁴ 25	15	7
Yapunya, 42% fructose (Australia) ⁶	52 ± 5	74	Healthy, 9	Glucose, 2 h	UO ⁴ 25	17	9
Pure (Capilano Honey Ltd, Richlands, Australia)	58 ± 6	83	Healthy, 8	Bread, 2 h	UO ⁴ 25	21	12
Commercial blend, 38% fructose (WA blend; Capilano Honey Ltd, Australia) ⁶	62 ± 3	89	Healthy, 9	Glucose, 2 h	UO ⁴ 25	18	11
Salvation Jane, 32% fructose (Australia) ⁶	64 ± 5	91	Healthy, 10	Glucose, 2 h	UO ⁴ 25	15	10
Commercial blend, 28% fructose (NSW blend; Capilano Honey Ltd, Australia) ⁶	72 ± 6	103	Healthy, 9	Glucose, 2 h	UO ⁴ 25	13	9
Honey, NS (Canada) ⁶	87 ± 8	124	Healthy, 6	Glucose, 2 h	3 25	21	18
Mean of 11 types of honey	55 ± 5	78 ± 7			25	18	10

587 Lactose

50 g lactose (Sigma Chemical Co, USA)	43	61	Type 2, 7	Glucose, 5 h ²³	6	—	—	—
25 g lactose (BDH, Poole, UK) ⁶	48	68 ± 8	Healthy, 10	Bread, 2 h	72	—	—	—
25 g lactose ²⁸	48	69 ± 10	Type 2, 6	Bread, 3 h	49	—	—	—
Mean of 3 studies	46 ± 2	66 ± 3			10		10	5
588 50 g maltose	105 ± 12	150	Healthy, 6	Glucose, 2 h	3	10	10	11
589 Sucrose								
50 g sucrose (Sigma Chemical Co, USA) ⁸	58	83	Type 2, 7	Glucose, 5 h ²³	6	—	—	—
50 g sucrose (Redpath Sugars, Toronto, Canada)	58	83 ± 15	Healthy, 8	Bread, 2 h	100			
50 g sucrose	59 ± 10	84	Healthy, 5	Glucose, 2 h	3	—	—	—
50 g sucrose	60	86	Type 2, number NS	Glucose, time NS	23	—	—	—
25 g sucrose (Redpath Sugars, Canada) ⁶	60	86 ± 9	Healthy, 8	Bread, 2 h	100	—	—	—
25 g sucrose ^{6,28}	64	91 ± 18	Type 2, 6	Bread, 3 h	49	—	—	—
50 g sucrose	65 ± 9	93	Healthy, 7	Glucose, 2 h	29	—	—	—
100 g sucrose (Redpath Sugars, Canada) ¹²	65	94 ± 14	Healthy, 8	Bread, 2 h	99	—	—	—
30 g sucrose ²⁹	82	117 ± 22	Type 2, 14	Bread, 2 h	70	—	—	—

25 g sucrose ⁶	110 ± 21	157	Healthy, 8	Glucose, 3 h	96	—	—	—
Mean of 10 studies	68 ± 5	97 ± 7	—	—	—	10	10	7
Sugar alcohols and sugar-replacement compounds								
590 Lactitol								
25 g lactitol ³⁰	-1 ± 7	-1	Healthy, 8	Glucose, 3 h	105	—	—	—
25 g lactitol MC (Danisco Sweeteners, Redhill, Surrey, UK) ³⁰	3 ± 1	4	Healthy, 10	Glucose, 2 h	UO ⁴	—	—	—
Mean of 2 studies	2 ± 3	3 ± 4	—	—	—	10	10	0
591 Litesse								
25 g Litesse II, bulking agent with polydextrose and sorbitol (Danisco Sweeteners, UK) ³⁰	7 ± 2	5	Healthy, 10	Glucose, 2 h	UO ⁴	10	10	1
25 g Litesse III ultra, bulking agent with polydextrose and sorbitol (Danisco Sweeteners, UK) ³⁰	4 ± 2	6	Healthy, 10	Glucose, 2 h	UO ⁴	10	10	0
592 Maltitol-based sweeteners or bulking agents (Cerestar, Vilvoorde, Belgium) ³⁰								
25 g Malbit CR (87% maltitol)	30 ± 12	43	Healthy, 8	Glucose, 3 h	96	10	10	3
25 g Maltidex 100 (> 72% maltitol)	44 ± 11	63	Healthy, 8	Glucose, 3 h	96	10	10	4
25 g Malbit CH (99% maltitol)	73 ± 29	104	Healthy, 8	Glucose, 3 h	96	10	10	7

25 g Maltidex 200 (50% maltitol)	89 ± 28	127	Healthy, 8	Glucose, 3 h	96	10	10	9
593 Xylitol (Danisco Sweeteners, UK) ³⁰								
25 g Xylitol	7 ± 7	10	Healthy, 8	Glucose, 3 h	105	—	—	—
25 g Xylitol C	8 ± 2	12	Healthy, 10	Glucose, 2 h	UO ⁴	—	—	—
Mean of 2 studies	8 ± 1	11 ± 1	—	—	—	10	10	1

VEGETABLES

594 Broad beans (Canada) ⁶	79 ± 16	113	Healthy, 6	Glucose, 2 h	3	80	11	9
595 Green peas								
Pea, frozen, boiled (Canada) ⁶	39	55	Type 2, number NS	Glucose, time NS	20	80	7	3
Pea, frozen, boiled (Canada) ⁶	51 ± 6	73	Healthy, 6	Glucose, 2 h	3	80	7	4
Pea, green (<i>Pisum sativum</i>) (India) ¹¹	54 ± 14	77	Healthy, 12–15	Glucose, 3 h ²²	65	80	7	4
Mean of 3 studies	48 ± 5	68 ± 7	—	—	—	80	7	3
596 Pumpkin (South Africa)	75 ± 9	107	Healthy, 6	Glucose, 2 h	29	80	4	3
597 Sweet corn								
Sweet corn, honey and pearl variety (New Zealand)	37 ± 12	53	Healthy, 9	Glucose, 2 h	25	80	16	6
Sweet corn on the cob, boiled 20 min (Australia)	48	69	Healthy, 6	Glucose, 2 h	47	80	16	8
Sweet corn (Canada)	59 ± 11	84	Healthy, 5	Glucose, 2 h	3	80	18	11

Sweet corn, boiled (USA)	60	86	Healthy, 16	Bread, 3 h	51	80	18	11
Sweet corn, boiled (USA)	60	85	Type 2, 5; IGT, 6 ¹⁰	Bread, 3 h	28	80	18	11
Sweet corn (South Africa)	62 ± 5	89	Healthy, 7	Glucose, 2 h	29	80	18	11
Mean of 6 studies	54 ± 4	78 ± 6	—	—	—	80	17	9
Sweet corn, whole-kernel, diet-pack, Featherweight, canned, drained, heated (USA)	46	66	Type 2, 20	Bread, 3 h	52	80	14	7
Sweet corn, frozen, heated in microwave (Green Giant; Pillsbury Canada Ltd, Toronto, Canada)	47	67 ± 4	Type 1 and 2, 9	Bread, 3 h	1	80	15	7
Root vegetables								
598 Beetroot (Canada) ⁶	64 ± 16	91	Healthy, 5	Glucose, 2 h	3	80	7	5
599 Carrots								
Carrots, raw (Romania) ^{6,8}	16	23	Type 2, 30	Glucose, 2 h	104	80	8	1
Carrots, peeled, boiled (Australia) ⁶	32 ± 5	46	Healthy, 8	Glucose, 2 h	UO ⁴	80	5	1
Carrots, peeled, boiled (Sydney, Australia) ⁶	49 ± 2	70	Healthy, 7	Glucose, 2 h	85	80	5	2
Carrots, NS (Canada) ⁶	92 ± 20	131	Healthy, 5	Glucose, 2 h	3	80	6	5
Mean of 4 studies	47 ± 16	68 ± 23	—	—	—	80	6	3
600 Cassava, boiled, with salt (Kenya, Africa)	46	65 ± 12	Type 2, 14	Bread, 2.5 h	40	100	27	12

601 Parsnips (Canada) ⁶	97 ± 19	139	Healthy, 5	Glucose, 2 h	3	80	12	12
Potato								
602 Baked potato								
Ontario, white, baked in skin (Canada)	60	85 ± 4	Type 1 and 2, 16	Bread, 3 h	1	150	30	18
603 Baked, russet Burbank potatoes								
Russet, baked without fat (Canada)	56	80 ± 5	Diabetic, 7	Bread, time NS	106	—	—	—
Russet, baked without fat, 45–60 min (USA)	78	112	Type 2, 20	Bread, 3 h	52	—	—	—
Russet, baked without fat (USA)	94	134	Type 2, 5; IGT, 6 ¹⁰	Bread, 3 h	28	—	—	—
Russet, baked without fat (USA)	111	158	Healthy, 16	Bread, 3 h	51	—	—	—
Mean of 4 studies	85 ± 12	121 ± 16	—	—	—	150	30	26
604 Boiled potato								
Desiree, peeled, boiled 35 min (Australia)	101 ± 15	144 ± 22	Healthy, 10	Bread, 2 h	107	150	17	17
Nardine (New Zealand)	70 ± 17	100	Healthy, 8	Glucose, 2 h	25	150	25	18
Ontario, white, peeled, cut into cubes, boiled in salted water 15 min (Canada)	58	83 ± 5	Type 1 and 2, 16	Bread, 3 h	1	150	27	16

Pontiac, peeled, boiled whole for 30 min (Australia)	56	80	Healthy, 6	Glucose, 2 h	47 150	26	14
Pontiac, peeled, boiled 35 min (Australia)	88 ± 9	125 ± 13	Healthy, 10	Bread, 2 h	107 150	18	16
Prince Edward Island, peeled, cubed, boiled in salted water 15 min (Canada)	63	90 ± 7	Type 1 and 2, 12	Bread, 3 h	1 150	18	11
Sebago, peeled, boiled 35 min (Australia)	87 ± 7	124 ± 10	Healthy, 10	Bread, 2 h	107 150	17	14
605 Boiled or cooked, white or type NS							
Type NS (Kenya, Africa)	24	34 ± 9	Type 2, 14	Bread, 2.5 h	40 150	28	7
White, cooked (Romania) ⁶	41	59	Type 2, 30	Glucose, 2 h	104 150	30	12
White, boiled (Canada)	54	77 ± 8	Diabetic NS, 7	Bread, time NS	106 150	27	15
Type NS, boiled (Australia)	56	80 ± 9	Type 2, 6	Bread, 3 h	108 150	19	11
Type NS, boiled in salted water (India)	76	108	Healthy, 9	Bread, 3 h	57 150	34	26
Mean of 5 studies	50 ± 9	72 ± 12	—	—	— 150	28	14
Type NS, boiled in salted water, refrigerated, reheated (India)	23	33	Healthy, 9	Bread, 3 h	57 150	34	8
606 Canned potatoes							
Prince Edward Island, canned, heated in microwave (Avon; Cobi Foods Inc, Port Williams, Canada)	61	87 ± 8	Type 1 and 2, 9	Bread, 3 h	1 150	18	11

New, canned, heated in microwave 3 min (Mint Tiny Taters; Edgell's, Cheltenham, Australia)	65 ± 9	93 ± 13	Healthy, 10	Bread, 2 h	107	150	18	12
Mean of 2 studies	63 ± 2	90 ± 3	—	—	—	150	18	11
607 French fries								
French fries, frozen, reheated in microwave (Cavendish Farms, New Annan, Canada)	75	107 ± 6	Type 1 and 2, 6	Bread, 3 h	1	150	29	22
608 Instant mashed potato								
Instant (France)	74 ± 12	106	Type 2, 3	Glucose, 3 h	9	—	—	—
Instant (Canada)	80 ± 13	114	Healthy, 8	Glucose, 2 h	3	—	—	—
Instant (Edgell's Potato Whip, Edgell's, Australia)	86	123	Healthy, 6	Glucose, 2 h	47	—	—	—
Instant (Carnation Foods Co Ltd, Manitoba, Canada)	86	123 ± 5	Type 1 and 2, 16	Bread, 3 h	1	—	—	—
Instant (Canada)	88	126 ± 6	Diabetic NS, 7	Bread, time NS	106	—	—	—
Instant mashed potato (Idahoan Foods, Lewisville, ID, USA)	97 ± 6	139	Healthy, 10	Glucose, 2 h	UO ⁴	—	—	—
Mean of 6 studies	85 ± 3	122 ± 5	—	—	—	150	20	17
609 Mashed potato								
Type NS (Canada)	67	96 ± 7	Diabetic, 7	Bread, time NS	106	—	—	—
Type NS (South Africa)	71 ± 10	101	Healthy, 7	Glucose, 2 h	29	—	—	—

Type NS (France)	83	118 ± 12	Healthy, 12	Bread, 3 h	55 —	—	—
Mean of 3 studies	74 ± 5	105 ± 7	—	—	— 150	20	15
Prince Edward Island, peeled, cubed, boiled 15 min, mashed (Canada)	73	104 ± 4	Type 1 and 2, 14	Bread, 3 h	1 150	18	13
Pontiac, peeled, cubed, boiled 15 min, mashed (Australia)	91 ± 9	130 ± 13	Healthy, 10	Bread, 2 h	107 150	20	18
610 Microwaved potato	—	—	—	—	— 150	21	12
Pontiac, peeled and microwave on high for 6–7.5 min (Australia)	79 ± 9	112 ± 13	Healthy, 10	Bread, 2 h	107 150	18	14
Type NS, microwaved (USA)	82	117	Type 2, 8	Glucose, 3 h ⁶	4 150	33	27
611 New potato							
New (Canada)	47	67	Diabetic, number NS	Glucose, time NS	20		
New (Canada)	54	77 ± 11	Type 2, 6	Bread, 3 h	30 —	—	—
New (Canada)	70 ± 8	100	Healthy, 8	Glucose, 2 h	3 —	—	—
Mean of 3 studies	57 ± 7	81 ± 10	—	—	— 150	21	12
New, unpeeled and boiled 20 min (Australia)	78 ± 12	112 ± 17	Healthy, 10	Bread, 2 h	107 150	21	16
612 Steamed potato							

Potato, peeled, steamed 1 h (<i>Solanum tuberosum</i>) (India) ¹¹	65 ± 11	93	Healthy, 12–15	Glucose, 3 h ²²	65 150	27	18
Potato dumplings (white-wheat flour, white potatoes, boiled in salted water (Italy)	52	74 ± 12	Type 2, 17	White bread, 3 h	31 150	45	24
613 Sweet potato							
Sweet potato (<i>Ipomoea batatas</i>) (Australia)	44	63	Healthy, 7	Potato, 3 h ²⁵	79 150	25	11
Sweet potato, NS (Canada)	48 ± 6	69	Healthy, 5	Glucose, 2 h	3 150	34	16
Sweet potato, peeled, cubed, boiled in salted water 15 min (Canada)	59	84 ± 5	Type 1 and 2, 13	Bread, 3 h	1 150	30	18
Sweet potato, kumara (New Zealand)	77 ± 12	110	Healthy, 9	Glucose, 2 h	25 150	25	19
Sweet potato, kumara (New Zealand)	78 ± 6	111	Type 2, 14	Glucose, 2 h	25 150	25	20
Mean of 5 studies	61 ± 7	87 ± 10	—	—	— 150	28	17
614 Swede							
Swede (rutabaga) (Canada) ⁶	72 ± 8	103	Healthy, 5	Glucose, 2 h	3 150	10	7
615 Tapioca							
Tapioca boiled with milk (General Mills Canada Inc, Etobicoke, Canada)	81	115 ± 9	Type 1 and 2, 10	Bread, 3 h	1 250	18	14
Tapioca (<i>Manihot utilissima</i>), steamed 1 h (India) ¹¹	70 ± 10	100	Healthy, 12–15	Glucose, 3 h ²²	65 250	18	12

616 Taro								
Taro (<i>Colocasia esculenta</i>) peeled, boiled (Australia)	54	77	Healthy, 7	Potato, 3 h ²⁵	79	—	—	—
Taro, peeled, boiled (New Zealand)	56 ± 12	80	Healthy, 9	Glucose, 2 h	25	—	—	—
Mean of 2 studies	55 ± 1	79 ± 2	—	—	—	150	8	4
617 Yam								
Yam, peeled, boiled (New Zealand)	25 ± 4	36	Type 2, 13	Glucose, 2 h	25	—	—	—
Yam, peeled, boiled (New Zealand)	35 ± 5	50	Healthy, 14	Glucose, 2 h	25	—	—	—
Yam (Canada)	51 ± 12	73	Healthy, 5	Glucose, 2 h	3	—	—	—
Mean of 3 studies	37 ± 8	53 ± 11	—	—	—	150	36	13

INDIGENOUS OR TRADITIONAL FOODS OF DIFFERENT ETHNIC GROUPS

African

618 Brown beans (South Africa)	24 ± 8	34	Healthy, 7	Glucose, 2 h	29	50 (dry)	25	6
619 Gram dhal (South Africa)	5 ± 3	7	Healthy, 7	Glucose, 2 h	29	50 (dry)	29	1
620 Maize meal porridge, unrefined, maize meal:water (1:3) (South Africa)	71 ± 6	101	Healthy, 8	Glucose, 2 h	29	50 (dry)	36	25
Maize meal porridge, refined, maize-meal:water (1:3) (South Africa)	74 ± 7	106	Healthy, 8	Glucose, 2 h	29	50 (dry)	40	30

Maize meal porridge or gruel (Kenya)	109	156 ± 15	Type 2, 13	Bread, 2.5 h	40 50 (dry)	38	41
621 M'fino or Morogo, wild greens (South Africa)	68 ± 8	97	Healthy, 6	Glucose, 2 h	29 120	50	34
622 Cassava, boiled, with salt (Kenya)	46	65 ± 12	Type 2, 14	Bread, 2.5 h	40 100	27	12
623 Millet flour porridge or gruel (Kenya)	107	153 ± 14	Type 2, 13	Bread, 2.5 h	40 —	—	—
624 Ga kenkey, prepared from fermented cornmeal (<i>Zea mays</i>) (Ghana) ³¹	12 ± 1	17	Healthy, 10	Glucose, 2 h ³²	109 150	13	7
625 Gari, roasted cassava dough (<i>Manihot utilissima</i>) (Ghana) ³¹	56 ± 3	80	Healthy, 10	Glucose, 2 h ³²	109 100	27	15
626 Unripe plantain (<i>Musa paradisiaca</i>) (Ghana) ³¹	40 ± 4	57	Healthy, 10	Glucose, 2 h ³²	109 120 (raw)	34	13
627 Yam (<i>Dioscorea</i>) (Ghana) ³¹	66	94	Healthy, 10	Glucose, 2 h ³²	109 150	36	23
Arabic and Turkish							
628 Hummus (chickpea salad dip)	6 ± 4	9	Healthy, 12	Glucose, 2 h	42 30	5	0
629 Kibbeh saynieh (made with lamb and burghul)	61 ± 16	87	Healthy, 12	Glucose, 2 h	42 120	15	9
630 Lebanese bread (white, unleaved), hummus, falafel and tabbouleh	86 ± 12	123	Healthy, 8	Glucose, 2 h	82 120	45	39

631 Majadra (Syrian, lentils and rice)	24 ± 5	34	Type 2, 9;	Glucose, 3 h ¹⁴	88 250	41	10
632 Moroccan couscous (stew of semolina, chickpeas, and vegetables)	58 ± 9	83	Type 2, 8; healthy, 8	Glucose, 3 h ¹⁴	88 250	29	17
633 Stuffed grapevine leaves (rice and lamb stuffing with tomato sauce)	30 ± 11	43	Healthy, 12	Glucose, 2 h	42 100	15	5
634 Tarhana soup (wheat flour, yogurt, tomato, and green pepper)	20	29	Type 2, 52;	Glucose, 2 h	32 —	—	—
635 Turkish bread, white-wheat flour	87	124	Type 2, 52; healthy, 31	Glucose, 2 h	32 30	17	15
636 Turkish bread, whole wheat	49	70	Type 2, 52; healthy, 31	Glucose, 2 h	32 30	16	8
637 Turkish noodle soup	1	1	Type 2, 52; healthy, 31	Glucose, 2 h	32 250 mL	9	0
Asian							
638 Broken rice, white, cooked in rice cooker (Lion Foods, Thailand)	86 ± 10	123	Healthy, 12	Glucose, 2 h	73 150	43	37
639 Butter rice, warm white rice and butter (Japan)	79	113	Healthy, 10	Rice, 2 h ²⁶	89 150	51	40
640 Curry rice (Japan)	67	96	Healthy, 10	Rice, 2 h ²⁶	89 150	61	41
641 Curry rice with cheese (Japan)	55	79	Healthy, 10	Rice, 2 h ²⁶	89 150	49	27
642 Glutinous rice							

Glutinous rice, white, cooked in rice cooker (Bangsue Chia Meng Rice Co, Bangkok, Thailand)	98 ± 7	140	Healthy, 12	Glucose, 2 h	73 150	32	31
Glutinous rice NS (Esubi Shokuhin, Japan)	86	123	Healthy, 6	Rice, 2 h ²⁶	89 150	65	55
Mean of 2 studies	92 ± 6	132 ± 9	—	—	— 150	48	44
643 Glutinous rice ball with cut glutinous cake (mochi) (Japan)	48	69	Healthy, 9	Rice, 2 h ²⁶	89 75	28	14
644 Glutinous rice cake with dried sea algae (Japan)	83	119	Healthy, 8	Rice, 2 h ²⁶	89 75	39	32
645 Glutaminous rice flour, instant, served warm with roasted ground soybean (Japan)	65	93	Healthy, 9	Rice, 2 h ²⁶	89 100	41	27
646 Jasmine rice, white, cooked in rice cooker (Golden World Foods, Bangkok, Thailand)	109 ± 10	156	Healthy, 12	Glucose, 2 h	73 150	42	46
647 Low-protein white rice with dried sea algae (Japan)	70	100	Healthy, 10	Rice, 2 h ²⁶	89 150	60	42
648 Lungkow bean thread (National Cereals, Oils and Foodstuffs, China)	26	37 ± 6	Type 1 and 2, 9	Bread, 3 h	1 180	45	12
649 Lychee, canned in syrup, drained (Narcissus brand, China)	79 ± 8	113	Healthy, 12	Glucose, 2 h	73 120	20	16
650 Mung bean noodles, dried, boiled (China)	39 ± 9	56	Healthy, 12	Glucose, 2 h	73 180	45	18
651 Nonglutaminous rice flour, served warm (Narcissus brand, China)	68	97	Healthy, 8	Rice, 2 h ²⁶	89 100	50	34

652 Rice cracker, plain (Sakada, Japan)	91	130	Healthy, 10	Rice, 2 h ²⁶	89 30	25	23
653 Rice gruel with dried algae (Satou Co)	81	116	Healthy, 10	Rice, 2 h ²⁶	89 250	19	15
654 Rice noodles, dried, boiled (Thai World, Bangkok, Thailand)	61 ± 6	87	Healthy, 12	Glucose, 2 h	73 180	39	23
655 Rice noodles, fresh, boiled (Australia)	40 ± 4	57	Healthy, 12	Glucose, 2 h	73 180	39	15
656 Rice vermicelli, Kongmoon (National Cereals, China)	58	83 ± 5	Type 1 and 2, 9	Bread, 3 h	1 180	39	22
657 Roasted rice ball (Satou Co Ltd, Japan)	77	110	Healthy, 9	Rice, 2 h ²⁶	89 75	27	21
658 Salted rice ball (Satou Co Ltd, Japan)	80	114	Healthy, 7	Rice, 2 h ²⁶	89 75	26	20
659 Soba noodles, instant, reheated in hot water, served with soup (Japan)	46	66	Healthy, 9	Rice, 2 h ²⁶	89 180	49	22
660 Stir-fried vegetables, chicken and rice, homemade (Australia)	73 ± 17	104	Healthy, 8	Glucose, 2 h	87 360	75	55
661 Sushi							
Sushi, salmon (I Love Sushi; Australia) ⁶	48 ± 8	69	Healthy, 10	Glucose, 2 h	UO ⁴ 100	36	17
Sushi, roasted sea algae, vinegar and rice (Japan)	55	79	Healthy, 9	Rice, 2 h ²⁶	89 100	37	20
Mean of 2 studies	52 ± 4	74 ± 5	—	—	— 100	37	19
662 Udon noodles							

Udon noodles, fresh, reheated (Fantastic, Windsor Gardens, Australia) ⁶	62 ± 8	89	Healthy, 10	Glucose, 2 h	UO ⁴ 180	48	30
Udon noodles, instant, with sauce and fried bean curd (Nishin Shokuhin, Japan)	48	69	Healthy, 9	Rice, 2 h ²⁶	89 180	47	23
Mean of 2 studies	55 ± 7	79 ± 10	—	—	— 180	48	26
663 White rice, dried sea algae and milk							
White rice, dried sea algae and milk, eaten together (Japan)	57	81	Healthy, 7	Rice, 2 h ²⁶	89 —	—	—
White rice, dried sea algae and milk (milk eaten before rice) (Japan)	56	80	Healthy, 9	Rice, 2 h ²⁶	89 —	—	—
White rice, dried sea algae and milk (milk eaten after rice) (Japan)	55	79	Healthy, 9	Rice, 2 h ²⁶	89 —	—	—
Mean of 3 types	56 ± 1	80 ± 1	—	—	— 300	47	26
664 White rice with dried fish strip (okaka) (Japan)	79	113	Healthy, 6	Rice, 2 h ²⁶	89 150	50	40
665 White rice with fermented soybean sp; (natto) (Japan)	56	80	Healthy, 10	Rice, 2 h ²⁶	89 150	43	24
666 White rice with instant miso soup sp; (soybean paste soup) (Japan)	61	87	Healthy, 10	Rice, 2 h ²⁶	89 150	47	29
667 White rice with low-fat milk (Japan)	69	99	Healthy, 9	Rice, 2 h ²⁶	89 300	47	32

668 White rice and nonsugar yogurt								
White rice and nonsugar yogurt eaten before rice (Japan)	59	84	Healthy, 10	Rice, 2 h ²⁶	89	—	—	—
White rice and nonsugar yogurt eaten together (Japan)	58	83	Healthy, 10	Rice, 2 h ²⁶	89	—	—	—
Mean of 2 types	59 ± 1	84 ± 1	—	—	—	150	32	19
669 White rice with pickled vinegar and cucumber								
White rice with pickled vinegar and cucumber (pickled food eaten before rice) (Japan)	63	90	Healthy, 9	Rice, 2 h ²⁶	89	—	—	—
White rice with pickled vinegar and cucumber (pickled food eaten with rice) (Japan)	61	87	Healthy, 11	Rice, 2 h ²⁶	89	—	—	—
Mean of 2 types	62 ± 1	89 ± 2	—	—	—	150	43	27
670 White rice topped with raw egg and soy sauce (Japan)	72	103	Healthy, 6	Rice, 2 h ²⁶	89	150	36	26
671 White rice with roasted ground soybean (Japan)	56	80	Healthy, 9	Rice, 2 h ²⁶	89	150	51	29
672 White rice with salted dried plum (umeboshi) (Japan)	80	114	Healthy, 10	Rice, 2 h ²⁶	89	150	49	39
673 White rice with sea algae rolled in sheet of toasted sea algae (Japan)	77	110	Healthy, 7	Rice, 2 h ²⁶	89	150	51	39

Asian Indian

674 Amaranth (<i>Amaranthus esculentum</i>), popped, eaten with milk and nonnutritive sweetener	97 ± 19	139	Type 2, 6	Glucose, 3 h ²²	43	30	19	18
675 Bajra								
Bajra (<i>Pennisetum typhoideum</i>), eaten as roasted bread made from bajra flour	55 ± 13	79	Type 2, 6	Glucose, 2 h	110	—	—	—
Bajra (<i>Pennisetum typhoideum</i>)	49	70	Healthy, 18	Bread, 3 h	50	—	—	—
Bajra (<i>Pennisetum typhoideum</i>)	67	96	Type 2, 6	Bread, 3 h	50	—	—	—
Mean of 3 studies	57 ± 5	82 ± 8	—	—	—	75 (dry)	50	29
676 Banana (<i>Musa sapientum</i>), Nendra variety, unripe, steamed 1 h ¹¹	70 ± 11	100	Healthy, 12–15	Glucose, 3 h ²²	65	120	45	31
677 Barley								
Barley (<i>Hordeum vulgare</i>)	48	69	Healthy, 8	Bread, 3 h	50	—	—	—
695 Green gram (<i>Phaseolus aureus</i>), soaked 12 h, stored moist 24 h, steamed 1 h ¹¹	38 ± 14	54	Healthy, 12–15	Glucose, 3 h ²²	65	150	17	6
696 Green gram, whole with varagu (<i>Paspalum scorbiculatum</i>), pressure cooked	57 ± 6	81	Type 2, 6	Glucose, 2 h	110	80	50	29
697 Green gram dhal with varagu (<i>Paspalum scorbiculatum</i>), pressure cooked	78 ± 12	111	Type 2, 6	Glucose, 2 h	110	78 (dry)	50	39

698 Horse gram (<i>Dolichos biflorus</i>) soaked 12 h, stored moist 24 h, steamed 1 h ¹¹	51 ± 11	73	Healthy, 12–15	Glucose, 3 h ²²	65 150	29	15
699 Idli							
Idli (parboiled and raw rice + black dhal, soaked, ground, fermented, and steamed) with chutney	77 ± 2	110	Type 2, 10	Glucose, 2 h	112 250	52	40
Idli (parboiled and raw rice + black dhal, soaked, ground, fermented, and steamed) with chutney	60 ± 2	86	Healthy, 11	Glucose, 2 h	112 250	52	31
Mean of 2 groups of subjects	69 ± 9	98 ± 12	—	—	— 250	52	36
700 Jowar, roasted bread made from Jowar flour (<i>Sorghum vulgare</i>)	77 ± 8	110	Type 2, 6	Glucose, 2 h	110 70 (dry)	50	39
701 Laddu							
Laddu (popped amaranth, foxtail millet, roasted legume powder, and fenugreek seeds) in hot sweet syrup	24 ± 4	34	Healthy, 5 females	Glucose, 2 h	114 —	—	—
Laddu (popped amaranth, foxtail millet, roasted legume powder, and fenugreek seeds) in hot sweet syrup	29 ± 4	41	Type 2, 5 males	Glucose, 2 h	114 —	—	—
Mean of 2 groups of subjects	27 ± 3	38 ± 4	—	—	— 50	31	8
702 Lentil and cauliflower curry with rice (Australia)	60 ± 10	86	Healthy, 8	Glucose, 2 h	87 360	51	31

703 Millet/Ragi (<i>Eleusine coracana</i>), dehusked, soaked 12 h, stored moist 24 h, steamed 1 h ¹¹	68 ± 10	97	Healthy, 12–15	Glucose, 3 h ²²	65	150	34	23
703 Millet/Ragi								
Millet/Ragi (<i>Eleusine coracana</i>) ¹¹	84	120	Type 2, 20	Glucose, 2 h	68	70	50 (dry)	42
Millet/Ragi (<i>Eleusine coracana</i>) flour eaten as roasted bread	104 ± 13	149	Type 2, 6	Glucose, 2 h	110	70 (dry)	50	52
Mean of 2 studies	94 ± 10	135 ± 15	—	—	—	—	—	—
705 Pongal								
Pongal (rice and roasted green gram dhal, pressure cooked)	90 ± 3	129	Type 2, 10	Glucose, 2 h	112	—	—	—
Pongal (rice and roasted green gram dhal, pressure cooked)	45 ± 2	64	Healthy, 8	Glucose, 2 h	112	—	—	—
Mean of 2 groups of subjects	68 ± 23	97 ± 33	—	—	—	250	52	35
706 Poori								
Poori (deep-fried wheat-flour dough) with potato palya (mashed potato)	82 ± 2	117	Type 2, 8	Glucose, 2 h	112	—	—	—
Poori (deep-fried wheat-flour dough) with potato palya (mashed potato)	57 ± 1	81	Healthy, 8	Glucose, 2 h	112	—	—	—
Mean of 2 groups of subjects	70 ± 13	99 ± 18	—	—	—	150	41	28

707 Rajmah (<i>Phaseolus vulgaris</i>)	19	27	Healthy, 6	Glucose, 2 h	54 150	30	6
708 Rice (<i>Oryza sativa</i>) boiled served with with potato palya (mashed potato)	69 ± 15	99	Type 2, 6	Glucose, 3 h ²²	43 150	38	26
709 Semolina							
Semolina (<i>Triticum aestivum</i>), steamed	55 ± 9	79	Type 2, 30	Glucose, 2 h ³²	69 67 (dry)	50	28
Semolina (<i>Triticum aestivum</i>), preroasted	76 ± 6	109	Type 2, 30	Glucose, 2 h ³²	69 67 (dry)	50	38
Semolina (<i>Triticum aestivum</i>) with							
fermented black gram dhal (<i>Phaseolus mungo</i>)	46 ± 12	66	Type 2, 30	Glucose, 2 h ³²	69 71 (dry)	50	23
Semolina (<i>Triticum aestivum</i>) with fermented green gram dhal (<i>Phaseolus aureus</i>)	62 ± 20	89	Type 2, 30	Glucose, 2 h ³²	69 71 (dry)	50	31
Semolina (<i>Triticum aestivum</i>) with fermented bengal gram dhal (<i>Cicer arietum</i>)	54 ± 7	77	Type 2, 30	Glucose, 2 h ³²	69 71 (dry)	50	27
710 Tapioca (<i>Manihot utilissima</i>), steamed 1 h ¹¹	70 ± 10	100	Healthy, 12–15	Glucose, 3 h ²²	65 250	18	12
711 Varagu (<i>Paspalum scorbiculatum</i>), pressure cooked 15 lb 12–15 min	68 ± 8	97	Type 2, 6	Glucose, 2 h	110 76 (dry)	50	34
712 Upittu							

Upittu (roasted semolina and onions, cooked in water)	67 ± 3	96	Type 2, 12	Glucose, 2 h	112	—	—	—
Upittu (roasted semolina and onions, cooked in water)	69 ± 4	99	Healthy, 11	Glucose, 2 h	112	—	—	—
Mean of 2 groups of subjects	68 ± 1	98 ± 2	—	—	—	150	42	28
713 Uppuma kedgerree								
Uppuma kedgerree (millet, legumes, fenugreek seeds; roasted and cooked in water)	18 ± 3	25	Healthy, 5	Glucose, 2 h	114	—	—	—
Uppuma kedgerree (millet, legumes, fenugreek seeds; roasted and cooked in water)	19 ± 3	28	Type 2, 5	Glucose, 2 h	114	—	—	—
Mean of 2 groups of subjects	18 ± 1	27 ± 2	—	—	—	150	33	6
Australian aboriginal								
714 <i>Acacia aneura</i> , mulga seed, roasted, wet ground to paste ⁶	8	11	Healthy, 7	Potato, 3 h ²⁵	79	50	17	1
715 <i>Acacia coriacea</i> , desert oak, seed bread ⁶	46	66	Healthy, 6	Bread, 3 h	79	75	24	11
716 <i>Araucaria bidwillii</i> , bunya tree nut, baked 10 min ⁶	47	67	Healthy, 7	Potato, 3 h ²⁵	79	50	16	7
717 Bush honey, sugar bag ⁶	43	61	Healthy, 7	Potato, 3 h ²⁵	79	30	25	11
718 <i>Castanospermum australe</i> , blackbean seed, sliced, soaked 1 wk, pounded and baked ⁶	8	11	Healthy, 7	Potato, 3 h ²⁵	79	50	9	1

719 <i>Dioscorea bulbifera</i> , cheeky yam, peeled, sliced, soaked 2 d, baked 15 min ⁶	34	49	Healthy, 7	Potato, 3 h ²⁵	79 150	36	12
720 <i>Macrozamia communis</i> , cycad palm seed, sliced, soaked 1 wk, pounded, baked ⁶	40 ± 2	57	Healthy, 7	Glucose, 2 h	85 50	25	10
Pacific Islanders							
721 Breadfruit (<i>Artocarpus altilis</i>) (Australia) ⁶	68	97	Healthy, 7	Potato, 3 h ²⁵	79 120	27	18
722 Banana/plantain, green							
Green banana, boiled (New Zealand)	38 ± 10	54	Healthy, 8	Glucose, 2 h	25 120	21	8
723 Sweet potato							
Sweet potato (<i>Ipomoea batatas</i>) (Australia)	44	63	Healthy, 7	Potato, 3 h ²⁵	79 150	25	11
Sweet potato, kumara (New Zealand)	77 ± 12	110	Healthy, 9	Glucose, 2 h	25 150	25	19
Sweet potato, kumara (New Zealand)	78 ± 6	111	Type 2, 14	Glucose, 2 h	25 150	25	20
Mean of 3 studies	66 ± 11	95 ± 16	—	—	— 150	28	17
724 Taro							
Taro (<i>Colocasia esculenta</i>) peeled, boiled (Australia)	54	77	Healthy, 7	Potato, 3 h ²⁵	79 —	—	—
Taro, peeled, boiled (New Zealand)	56 ± 12	80	Healthy, 9	Glucose, 2 h	25 —	—	—

Mean of 2 studies	55 ± 1	79 ± 2	—	—	—	150	8	4
725 Yam								
Yam, peeled, boiled (New Zealand)	25 ± 4	36	Type 2, 13	Glucose, 2 h	25	—	—	—
Yam, peeled, boiled (New Zealand)	35 ± 5	50	Healthy, 14	Glucose, 2 h	25	—	—	—
Mean of 2 groups of subjects	30 ± 5	43 ± 7	—	—	—	150	36	13

Israeli

726 Melawach (dough made from white-wheat flour and butter, fried)

Melawach	61 ± 10	87	Type 2, 9; healthy, 9	Glucose, 3 h ¹⁴	88	—	—	—
Melawach	71 ± 7	101	Type 2, 14	Glucose, 3 h ¹⁴	115	—	—	—
Mean of 2 studies	66 ± 5	94 ± 7	—	—	—	115	53	35
727 Melawach + 15 g locust bean (<i>Ceratonia siliqua</i>) fiber (soluble)	31 ± 6	44	Type 2, 9	Glucose, 3 h ¹⁴	115	130	53	16
728 Melawach + 15 g maize cob fiber (insoluble)	59 ± 10	84	Type 2, 9	Glucose, 3 h ¹⁴	115	130	53	31
729 Melawach + 15 g lupin (<i>Lupinus albus</i>) fiber	72 ± 10	103	Type 2, 10	Glucose, 3 h ¹⁴	115	130	53	38

Pima Indian

730 Acorns, stewed with venison (<i>Quercus emoryi</i>) ⁶	16 ± 1	23	Healthy, 8	Glucose, 2 h	116 100	6	1
731 Cactus jam (<i>Stenocereus thurberi</i>)	91	130 ± 19	Healthy, 8	Bread, 2 h	117 30	20	18
732 Corn hominy (<i>Zea mays</i>) ⁶	40 ± 5	57	Healthy, 8	Glucose, 2 h	116 150	30	12
733 Fruit Leather (<i>Stenocereus thurberi</i>)	70	100 ± 19	Healthy, 8	Bread, 2 h	117 30	24	17
734 Lima beans broth (<i>Phaseolus lunatus</i>) ⁶	36 ± 3	51	Healthy, 8	Glucose, 2 h	116 250 mL	32	12
735 Mesquite cakes (<i>Prosopis velutina</i>) ⁶	25 ± 3	36	Healthy, 4	Glucose, 2 h	116 60	4	1
736 Tortilla (<i>Zea mays</i> and <i>Oleaya tesota</i>)	38	54 ± 9	Healthy, 8	Bread, 2 h	117 60	25	9
737 White teparies broth (<i>Phaseolus acutifolius</i>) ⁶	31 ± 3	44	Healthy, 8	Glucose, 2 h	116 250 mL	32	10
738 Yellow teparies broth (<i>Phaseolus acutifolius</i>) ⁶	29 ± 3	41	Healthy, 8	Glucose, 2 h	116 250 mL	26	8
South American							
739 Arepa, corn bread cake, made with corn flour (Mexico)	72	102	Healthy, 6	Glucose, 4 h ³³	118 100	43	31
740 Arepa, made from ordinary dehulled dent corn flour (25% amylose) ^{9,34}	81	116	Healthy, 9	Arepa, 2 h ³⁵	119 100	43	35
741 Arepa, made from dehulled high-amylose (70%) corn flour ^{9,34}	44	63	Healthy, 9	Arepa, 2 h ³⁵	119 100	25	11

742 Black beans	30	43 ± 17	Type 2, 27; healthy, 21	Bread, 3 h	98 150	23	7
743 Brown beans	38	54 ± 15	Type 2, 27; healthy, 21	Bread, 3 h	98 150	25	9
744 Corn tortilla (Mexican)	52	74 ± 7	Healthy, 8	Bread, 3.5 h	120 50	24	12
745 Corn tortilla, served with refried mashed pinto beans and tomato sauce (Mexican)	39	56 ± 8	Healthy, 8	Bread, 3.5 h	120 100	23	9
746 Corn tortilla, fried, with mashed potato, fresh tomato and lettuce (Mexican)	78	111 ± 12	Healthy, 8	Bread, 3.5 h	120 100	15	11
747 Nopal (prickly pear cactus)	7	10 ± 17	Type 2, 27; healthy, 21	Bread, 3 h	98 100	6	0
748 Pinto beans, boiled in salted water	14	19 ± 3	Healthy, 8	Bread, 3.5 h	120 150	25	4
749 Wheat tortilla (Mexican)	30	43 ± 7	Healthy, 8	Bread, 3.5 h	120 50	26	8
750 Wheat tortilla served with refried pinto beans and tomato sauce (Mexican)	28	40 ± 13	Healthy, 8	Bread, 3.5 h	120 100	18	5

¹ NS, not specified; type 1 and type 2, subjects with type 1 and type 2 diabetes; AUC, area under the curve. Serving sizes in grams unless specified otherwise.

² $\bar{x} \pm \text{SEM}$. Two GI values are shown for each food—one in which glucose sugar was used as the reference food and one in which white bread was used as the reference food.

³ Estimated by multiplying the food's listed GI value with glucose as the reference food by the listed g carbohydrate per serving and dividing by 100.

- ⁴ Human Nutrition Unit (Sydney University, Australia), unpublished observations, 1995–2002.
- ⁵ The low GI may be explained by the inclusion of rolled oats in the recipe.
- ⁶ Portions of the test food and the reference food contained 25 g carbohydrate.
- ⁷ V Lang (Danone Vitapole Company, Le Plessis-Robinson, France), unpublished observations, 1996–2000.
- ⁸ GI calculated from the AUC for glucose.
- ⁹ GI calculated by using a mathematical formula based on results from an in vitro starch hydrolysis assay.
- ¹⁰ Impaired glucose tolerance.
- ¹¹ Both the test food and the reference food contained 75 g carbohydrate.
- ¹² Both the test food and the reference food contained 100 g carbohydrate.
- ¹³ Values based on 0.5 g carbohydrate/kg body wt.
- ¹⁴ AUC measured over 3 h for only 5 time points (0, 30, 60, 120, and 180 min).
- ¹⁵ GI corrected for added milk and adjusted to represent a 50-g carbohydrate portion size.
- ¹⁶ Made from raw oats that were cooked for 20 min.
- ¹⁷ Used as reference food and given a GI of 100. The GI of the test food was measured by expressing the glucose AUC value for the test food as a percentage of the AUC value for wheat chapatti.
- ¹⁸ GI calculated from $\text{AUC food}/\text{AUC glucose}$ formula. The AUC value was calculated over 3 h for 5 time points only.
- ¹⁹ J Dzieniszewski, J Ciok (National Food and Nutrition Institute, Poland), unpublished observations, 1996–2001.
- ²⁰ J Brand-Miller, S Holt (Sydney University, Australia), and V Lang (Danone Vitapole Company, Le Plessis-Robinson, France), unpublished observations, 2000 and 2001.
- ²¹ M Champ (INRA, France) and V Lang (Danone Vitapole Company, France), unpublished observations, 1998.

²² AUC measured over 3 h for only 4 time points (0, 1, 2, and 3 h).

²³ AUC calculated as the area above fasting to 3 h only.

²⁴ AUC measured over 5 h, but blood samples taken at hourly intervals only.

²⁵ Potato used as reference food with a GI fixed at 80. The GI of the test food was calculated by expressing the test food's glucose AUC value as a percentage of the potato's AUC value.

²⁶ White rice was used as the reference food, but glucose was also tested and had a GI of 122. The observed GI was multiplied by 100 and then divided by 122 to convert it to a GI on the glucose scale (ie, glucose = reference food with a GI of 100).

²⁷ Blood glucose measured at 30-min intervals.

²⁸ GI for sugars calculated from the glycemic response for a meal of sugar and rolled oats minus the glycemic response for the oats alone.

²⁹ Both the test food and the reference food contained 30 g carbohydrate.

³⁰ Total weight of the test food was 25 g, whereas reference food contained 25 g available carbohydrate. The carbohydrate content of the test food was assumed to be 100% available, which may be an overestimate.

³¹ Eaten as part of a mixed meal with fish, tomato, and onion sauce.

³² AUC measured over 2 h for 4 time points (0, 30, 60, and 120 min).

³³ AUC measured over 4 h for only 6 time points (0, 30, 60, 120, 180, and 240 min).

³⁴ Both the test food and the reference food contained 45 g carbohydrate.

³⁵ Reference food was an ordinary corn flour arepa.