

**THERMAL CHARACTERISTICS & STORAGE CONDITION OF VARIOUS FOODS**

TYPE OF GOODS	Storage conditions		Approximate storage life	Water Ratio %	Highest Freezing Point C°	Special heat avouce Freezing Kj/(Kg.K)	Specific Heat Below Freezing KJ/(Kg.K)	Latent Heat KJ/Kg
	temperature C°	Rel. Humidity %						
Artichokes	0	95-100	2 (W)	84	-1.2	3.65	1.89	280
Asparagus	0 -2	95-100	2-3 (w)	93	-0.6	3.95	2	310
Beans, Snap	4 - 7	90-95	7-10 (D)	89	-0.7	3.82	1.95	297
Bets, Topped	0	95	10-14 (D)	-0.4				
Brussels Sprouts	0	95-100	3-4 (W)	85	-0.8	3.68	1.9	284
Cabbage	0	98-100	5-6 (M)	92	-0.9	3.92	1.99	307
Carrots, topped	0	98-100	4-6 (W)	88	-1.4	3.78	1.94	294
Cauliflower	0	95-98	3-4 (W)	92	-0.8	3.92	1.99	307
Celey	0	98-100	2-3 (M)	94	-0.5	3.98	2.02	314
Sweet Corn	0	95-98	4-8 (D)	74	-0.6	3.31	1.76	247
Cucumbers	7 - 13	95	10-14 (D)	96	-0.5	4.05	2.04	320
Frozen Vegitable	-23,-18		6-12 (M)	61				
Garlic , Dry	0	65-70	6-7 (M)	61	-0.8	2.88	1.6	203
Garlic , Leafy	0	95-100	10-14 (D)	93	-0.3	3.95	2	310
Leek	0	95-100	2-3 (M)	85	-0.7	3.68	1.9	284
Mushroom	0	95	3-4 (D)	91	-0.9	3.88	1.98	304
Green Onions	0	95-100	3-4 (W)	89	-0.9	3.82	11.95	297
Pear , Green	0	95-98	1-2 (W)	74	-0.6	3.32	1.77	247
Peppers	7 -13	90-95	2-3 (w)	92	-0.7	3.92	1.99	307
Potatoes	3 -4	90-95	4-5 (M)	81	-0.6	3.55	1.85	270
Radishes	0	95-100	3-4 (W)	95	-0.7	4.02	2.03	317
Spinach	0	95-98	10-14 (D)	93		3.95	2	310
Pumpkins	10-13	70-75	2-3 (M)	91	-0.8	3.89	1.98	304
Summer Squash	0 -10	85-90	5-15 ( D)	94	-0.5	3.99	2.02	314
Tomatoes M/green	13-21	90-95	1-3 (W)	93	-0.6	3.95	2	310
Tomatoes Firm Ripe	7 -20	85-90	4-7 (D)	92	-1.1	3.92	1.99	307
Lettuce	0 -1	95-100	2-3 (w)	95	-0.2	4.02	2.03	317
Apple	0- 3	90-95	8-9 (M)	84	-1.1	3.65	1.89	280
Apricot	0 -1	90-95	1-3 (W)	85	-1.1	3.68	1.9	284
Avocado	3-4	85-90	2-8 (M)	65	-0.3	3.01	1.67	253
Bananas	13- 14	85-95		75	-0.8	3.56	1.78	250
Blackberry	-0.5 - 0	90-95	3 (D)	85	-0.8	3.68	1.9	284
Cherry	-1 - 0.5	90-95	2-3 (w)	80	-1.8	3.51	1.84	267
Coconut	0 - 1	90-95	3-5 (M)	82	-0.8	3.58	1.87	274
Dates	- 18 - 0	75	6-12 ( M)	20	-16	1.59	1.09	67
Fig Fresh	-1 - 0	85-90	7-10 ( D)	78	-2.4	3.45	1.81	260
Frozen Fruts	-24- -18	90-95	18-24 (M)					
KIWI	0-Jan	90-95	3-5 ( M)	82	-1.7	3.58	1.87	273
Lemon	11-12	85-90	1-4 (M)	89	-1.4	3.82	1.95	297
Oranges	3 - 9	85-90	3-5 (M)	86	-1.3	3.72	1.92	287
Peaches	- 5 - 0	90-95	2-4 ( W)	89	-0.9	3.82	1.95	297
Pears	-1.6 - 0.5	90-95	2-7 ( M)	83	-1.6	3.62	1.88	277
Plum	-1 - 0	90-95	2-4 (W)	86	-0.8	3.72	1.92	287
Straberries	- 5 - 0	90-95	5-7 ( D)	90	-0.8	3.85	1.97	300
Watermelon	4 - 10	90	2-3 (w)	93	-0.4	3.95	2	310

**FISHES - MEAT - POULTRY PRODUCTS**

TYPE OF GOODS	Storage contitions		Approximate storage life	Water Ratio %	Highest Freezing Point C°	heat avouce Freezing Kj/(Kg.K)	Heat Below Freezing KJ/(Kg.K)	Latent Heat KJ/Kg
	temperature C°	Rel. Humidity %						
Turbot/Salomon/ Tuna Fish freesh	- 1 -2	95-100	18 (D)	61-70	-2.2	3.18	1.75	235
Frozen Fish	-29 / -18	90-95	6-8 (M)					
Beef < fresh	0 - 1	88-92	1-6 (W)	62-77	-2.2/-1.7	2.91 - 3.43	1.62 -1.8	207-257
Beef Forzen	-23 / -18	90-95	9-12 (M)					
Lamb Fresh	0 - 1	85-90	5-12 (D)	60-70	- 2.2/-1.7	2.85-3.18	159 -1.72	200-233
Lamp Frozen	- 23 /-18	90-95	8-10 (M)					
Poultty Fresh	. 0	85-90	1 ( W)	74	-2.8	3.82	1.77	247
Poultty Frozen	-23/ -18	90-95	8-12 (M)					

Note:- 1Kcal/Kg= 4.18 KJ/Kg :- **Latent Heat**:- the heat required to convert a solid into a liquid or vapour, or a liquid into a vapour, without change of temperature : **1KJ=0.28W**

