

# Calibration of Thermometers at Varied Altitudes

Calibration of thermometers can be affected when using the boiling water method in areas of high altitude. Certain Australian mountain ranges are high enough to interfere with thermometer calibration. Water will boil at temperatures around 94°C at the highest towns in NSW and if the expectation is 100°C then thermometers appear to exceed the +/- 1°C tolerance.

Listed below are examples of the highest towns in NSW and the boiling point of water temperature.

Town	Elevation	Boiling Point °C
Perisher Village	1721	94.2
Cabramurra	1461	94.9
Thredbo Village	1447	95.2
Guyra	1336	95.5
Oberon	1103	96.3
Nimmitabel	1082	96.3
Mount Victoria	1071	96.3
Glen Innes	1071	96.3
Blackheath	1067	96.3
Medlow Bath	1064	96.5
Walcha	1047	96.5
Adaminaby	1026	96.5
Katoomba	1025	96.5
Uralla	1004	96.5
Armidale	982	96.8
Lakewood Estate	970	96.8
Millthorpe	969	96.8
Deepwater	967	96.8
Spring Hill	947	96.8
Portland	944	96.8

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Town	Elevation	Boiling Point °C
Jindabyne	918	96.8
Lithgow	916	96.8
Wallerawang	898	97.1
Crookwell	896	97.1
Emmaville	886	97.1
Cullen Bullen	879	97.1
Blayney	874	97.1
Wentworth Falls	871	97.1
Orange	869	97.1
Berridale	862	97.1
Clifton Grove	855	97.1
Tenterfield	851	97.1
Captains Flat	848	97.1
Taralga	842	97.1
Bendemeer	826	97.3
Cooma	793	97.3
Tingha	786	97.3
Batlow	780	97.3
Delegate	761	97.6
Dorrigo	755	97.6
Gulgai	741	97.6
Robertson	731	97.6
Lawson	728	97.6
Exeter	712	97.6
Bombala	701	97.6
Bungendore	695	97.6
Wingello	685	97.8
Bowral	681	97.8
Moss Vale	678	97.8
Perthville	678	97.8

# Calibration of Thermometers at Varied Altitudes

Altitude Above Sea Level (M)	Boiling Point °C
0	100.0
76	99.7
152	99.5
229	99.2
305	98.9
381	98.6
457	98.4
533	98.1
610	97.8
686	97.6
726	97.3
838	97.1

Altitude Above Sea Level (M)	Boiling Point °C
914	96.8
991	96.5
1067	96.3
1219	95.7
1295	95.5
1372	95.2
1448	94.9
1524	94.7
1600	94.4
1676	94.2
1753	93.9
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*This is has been published as a guide and in no way guarantees your calibration is being undertaken correctly. In addition Food Aware Australia does not guarantee the information in this document is correct or validated, however all care has been taken.*