

Sake Amino Acid Comparison

		Sake	Beer	Wine	
Amino Acid (mg/100ml)		Honjozo	Pilsner	White	
1	Aspartic Acid	Umami	27	6	2
2	Glutamic Acid	Umami	33	5	3
Umami		Sub Total	60	11	5
		%	20.1%	7.6%	8.6%
3	Threonine	Sweet	5	2	1
4	Serine	Sweet	9	2	1
5	Asparagine	Sweet	0	5	2
6	Glutamine	Sweet	8	7	2
7	Proline	Sweet	26	30	11
8	Glycine	Sweet	15	4	1
9	Alanine	Sweet	41	16	5
Sweet		Sub Total	104	66	23
		%	34.8%	45.5%	39.7%
10	Valine	Bitter	12	11	0
11	Cysteine	Bitter	30	5	10
12	Methionine	Bitter	0	0	1
13	Isoleucine	Bitter	11	5	0
14	Leucine	Bitter	15	8	2
15	Tyrosine	Bitter	10	8	1
16	Phenylalanine	Bitter	10	10	1
17	Tryptophan	Bitter	0	4	1
18	Lysine	Bitter	13	0	2
19	Histidine	Bitter	6	7	3
20	Arginine	Bitter	28	10	9
Bitter		Sub Total	135	68	30
		%	45.2%	46.9%	51.7%
Total Amino Acids		299	145	58	

Source: Shun Mitsui, Aichi Center for Industry & Science Technology

<http://www.aichi-inst.jp/shokuhin/>