The effect of three different debittering techniques on bitterness reduction and quality of lime juices were studied. These have been done on raising pH of the juice by using sodium citrate and sodium bicarbonate, addition of sweetening agents by using sucrose and maltose; and removal bitter principles by using Floricil (activated Magnesium silicate). d-Limonin, titratable acidity, pH, ascorbic acid, total soluble solids, colour and sensory quality were determined. All, except addition of sweetening agents, led to significantly reduce (p<0.01) in d-limonin contents of the treated juice as compared to control (92.37 ± 0.54 mg/L). The highest reduction (651.55%) in limonin content (44.75 ± 0.23 mg/L) were Floricil-treated juice (60 g/L) with slighty change in pH, (2.30 to 2.75), total soluble solids (8.0 to 9.0%) to that of control. Floicil was considered best in the extent of debittering taste by a panel of five judges. Raising pH of the juice to 3.8-4.0 by using sodium citrate (55 g/L) and sodium bicarbonate (35 g/L), the results showed a decrease in d-limonin (26.16% and 16.54%, respectively) and retained the same amount of ascorbic acid and color as compared to control. Both of raising pH agents gave the extent of debittering taste, and showed a significant increase (p<0.01) in total soluble solids (8 to 12.4%), but sodium bicarbonate showed some loss (36-41%) of titratable acidity. Addition of sweetening agents did not show any change in d-limonin content (range from 90.20 to 93.30 mg/L) and ascorbic acid (range from 0.20 to 0.22 mg/ml) as compared to control.