

Effect of Roasting on the Chemical Composition and Protein Quality of Lupin Seeds (*Lupinus albus* cv Multolupa)

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The effect of roasting lupin seeds (*Lupinus albus* cv Multolupa) for 10, 20, 30, and 40 min at 80-90°C was studied. Raw lupin was shown to be markedly deficient in the S-amino acids. These were not affected by roasting for 10 min, although a mild loss was observed for isoleucine and valine. However, heating for up to 40 min caused important losses in lysine and methionine + cystine. PER for raw lupin was 0.80 (casein 2.93) and that of the 10 min heated sample was 0.92 (NS), while roasting for 20, 30 and 40 min caused a severe reduction in protein quality (PER 0.59, 0.53 and 0.46 respectively). All these values improved significantly ($p < 0.01$) by supplementation with 0.1% DL-methionine. Heating lupin seeds for 10 min may help to remove the 'beany' flavor of this legume. Copyright © 1986, Wiley Blackwell. All rights reserved