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Title	Chemical composition of roasted kernel of Moroccan almond seedling	
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Abstract		
<p>Almond (<i>Prunus amygdalus</i>) kernel is considered of high nutritional value and rich of antioxidant components of great interest for human health. Almond kernels may be consumed in many different ways, including roasted kernels. The present work aims at determining the changes in the chemical components of kernels after roasting in pan with sand at 80°C during 25 min, as done in Northern Morocco. After roasting, oil content increased from 56% to 58.8%, protein content from 18.24% to 23.27%, and sugar content from 5.47% to 6.84%. These results show that kernels maintain their nutritional value after roasting. Fatty acid composition was affected, with significant decreases of palmitoleic, oleic and linoleic acids. The ratio of oleic to linoleic acids, a good index of resistance to rancidity, also decreased after roasting, although it was still similar to that of the raw kernels of some commercial cultivars. The concentration of the tocopherol homologues was altered after roasting: α-tocopherol decreased, especially in 'Beldi', characterised by low values before toasting. In 'Marcona', with higher tocopherol concentration in the raw kernel, the decrease was not so drastic. On the other side, γ-tocopherol increased in all samples after roasting. These results clearly show that the fatty acid profile and the tocopherol concentration are affected, but not drastically, by the roasting method adopted by farmers in Northern Morocco. As a consequence, the quality of these roasted kernels is not altered as compared to the raw kernels.</p>		