

**Title** Influence of processing on the content of sugars in green Arabica coffee beans  
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### **Abstract**

Quantitative analyses of low molecular sugars in green coffees (*Coffea arabica* L. var. Acaià) that were processed in parallel either by the traditional wet or the traditional dry method, revealed a close correlation between the kind of post-harvest treatment and the contents of fructose and glucose. While in *washed* coffee beans (wet processing) only low amounts of these both hexoses were present, those in *unwashed* coffees (dry processing) were significantly higher. Model-processing experiments in the laboratory confirmed these findings. Moreover, a comparison with the untreated controls revealed that the low levels of both sugars are the consequence of a decrease in the case of wet processing, whereas they remained unchanged or even increased in the case of dry processing. Further minor sugars are also affected by post-harvest treatment. The amounts of galactose, arabinose and mannose show a similar arrangement as those for glucose and fructose, although their overall concentration is about 100-fold lower. Sucrose, the major low molecular sugar in green coffee beans, is not significantly affected by coffee processing. The influence of an active seed metabolism on the observed alterations of the sugar concentrations is discussed.