

Figure S1: Comparison of the X-ray fluorescence spectra obtained for reference materials NIST SRM 1566 Oyster Tissue (red full curve) and NIST SRM 1571 Orchard Leaves (green dashed curve).

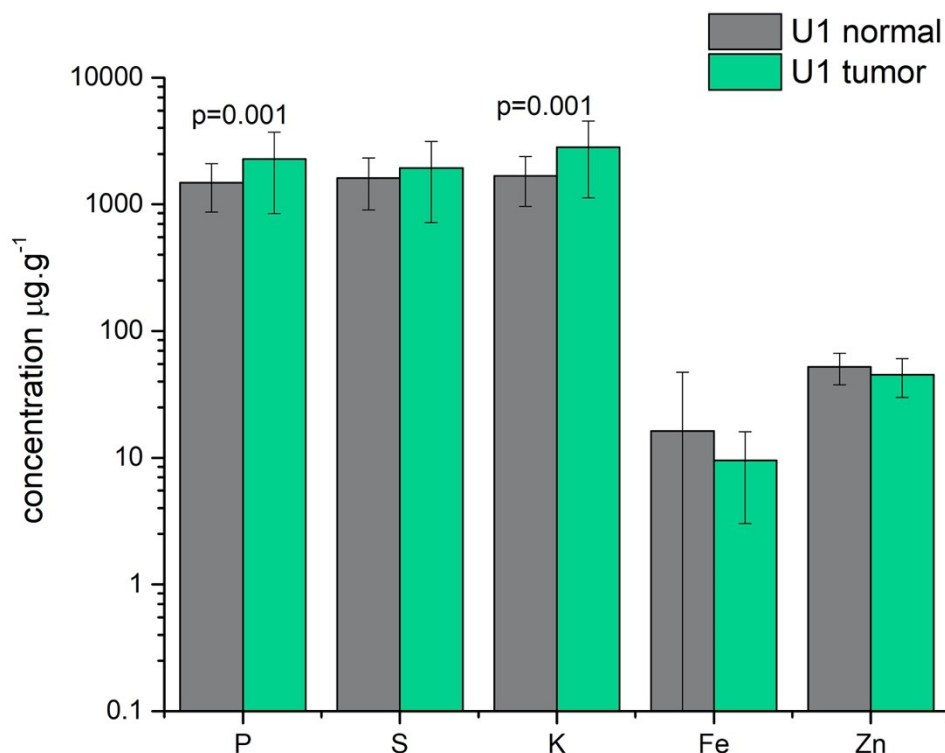


Figure S2: Comparison of mean elemental concentration for normal and tumor for sample U01. Error bars correspond to one standard deviation of 15 measurements. Significant differences for Wilcoxon Sign rank test are presented with correspondent p-value.

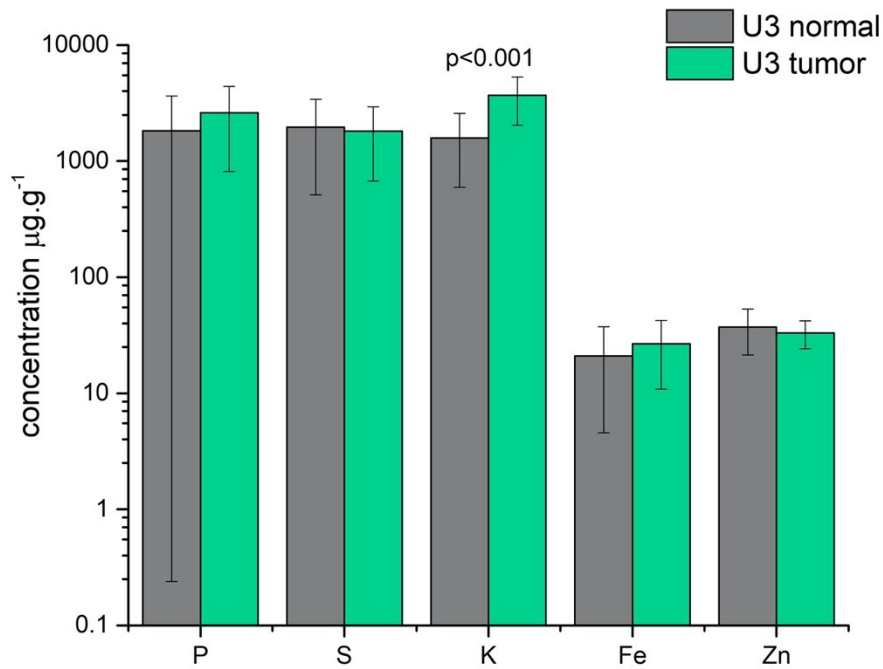


Figure S3: Comparison of mean elemental concentration for normal and tumor for sample U03. Error bars correspond to one standard deviation of 15 measurements. Significant differences for Wilcoxon Sign rank test are presented with correspondent p-value.

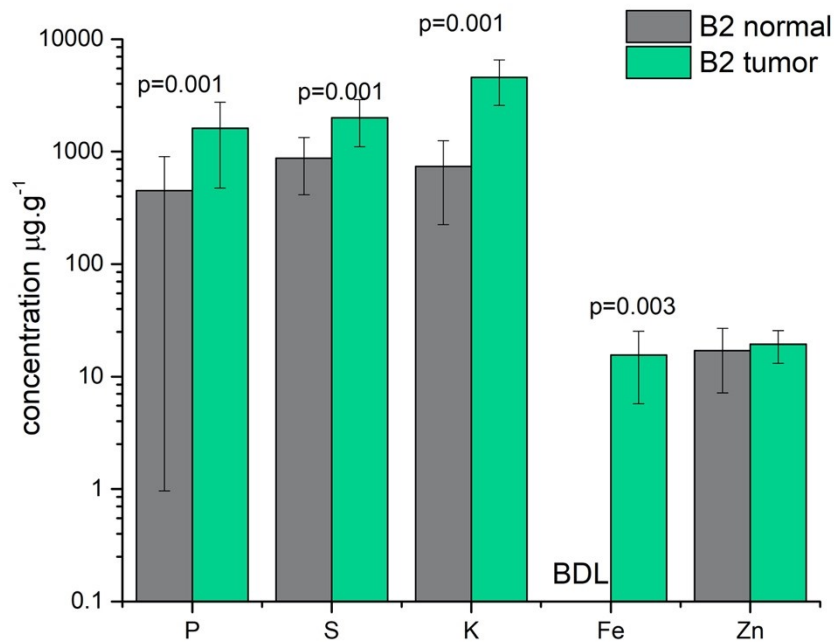


Figure S4: Comparison of mean elemental concentration for normal and tumor for sample B02. Error bars correspond to one standard deviation of 15 measurements. Significant differences for Wilcoxon Sign rank test are presented with correspondent p-value.

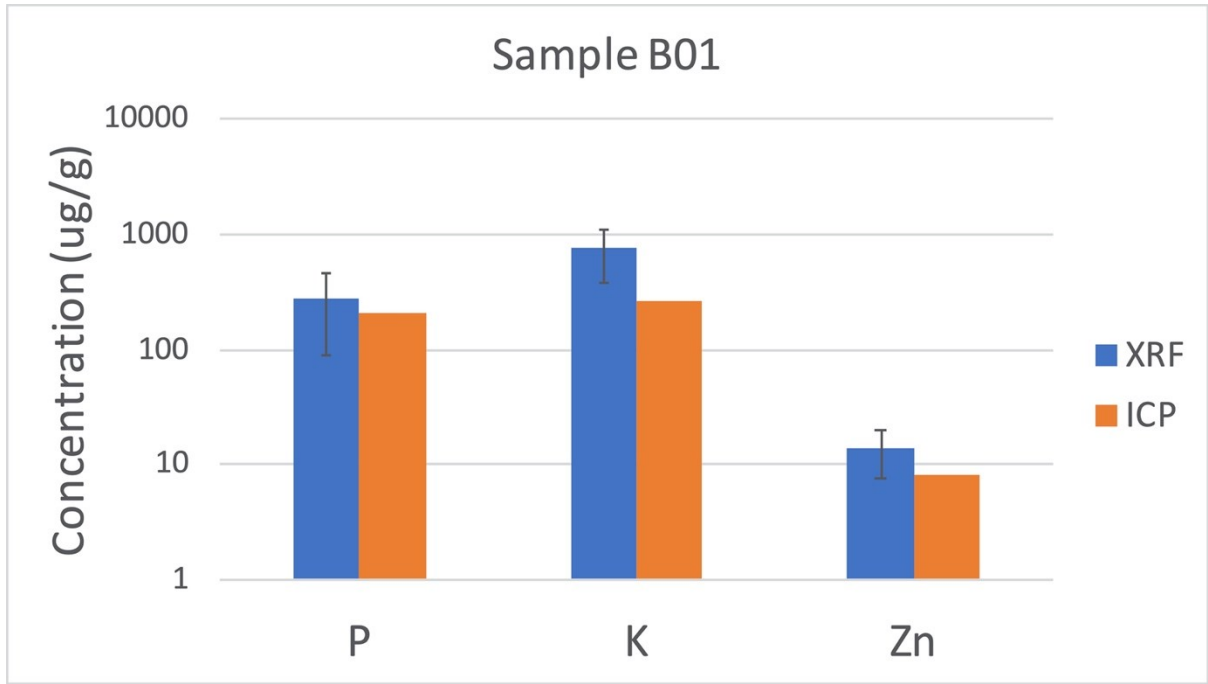


Figure S5: Comparison of the concentration values of P, K and Zn in sample B01 Normal, determined by XRF and ICP-AES analysis. ICP measurements were performed using Horiba Jobin-Yvon, France, Ultima, model equipped with a 40.68 MHz RF generator, Czerny-Turner monochromator with 1.00 m (sequential).