

SUPPLEMENTARY MATERIAL

# NIR spectroscopy as a rapid tool for histamine control in raw and processed tuna

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**Table S1.** Main quantitative and qualitative (discriminant) applications of NIR spectroscopy to different fish and seafood species.

Purpose	Species	Reference
<b><i>NIR qualitative methodology</i></b>		
Fresh vs. frozen	Swordfish ( <i>Xiphias gladius</i> )	[29]
	Cuttlefish ( <i>Sepia officinalis</i> )	[30]
	Gadidae family ( <i>Gadus morhua</i> , <i>Melanogrammus aeglefinus</i> )	[31]
Fresh vs. frozen	Cyprinidae family ( <i>Mylopharyngodon piceus</i> , <i>Ctenopharyngodon idellus</i> , <i>Hypophthalmichthys molitrix</i> , <i>Aristichthys nobilis</i> , <i>Cyprinus carpio</i> , <i>Parabramis pekinensis</i> )	[32]
Production method	Rainbow trout ( <i>Oncorhynchus mykiss</i> )	[33]
Production method	Sea bass ( <i>Dicentrarchus labrax</i> )	[34]
Geographical origin	Anchovies ( <i>Engraulis encrasicolus</i> )	[35]
Geographical origin	Sea cucumber ( <i>Apostichopus japonicus</i> )	[36]
<b><i>NIR quantitative methodology</i></b>		
TVB-N	Grass carp ( <i>Ctenopharyngodon Idella</i> )	[37]
TBARS and OFR (fluorescence compounds)	Saithe ( <i>Pollachius virens</i> ) and hoki ( <i>Macruronus novaezelandiae</i> )	[38]
Pigments concentrations	Atlantic salmon ( <i>Salmo salar</i> )	[39]
Histamine	Tuna	[40]
	Bivalve molluscs ( <i>Saccostrea glomerata</i> , <i>Ostrea angasi</i> , <i>Crassostrea gigas</i> , <i>Mytilus galloprovincialis</i> , <i>Anadara trapezia</i> )	[41]
Proximate composition	Tilapia	[42]
Fatty acids classes	Atlantic salmon ( <i>Salmo salar</i> )	[43]
Sodium chloride concentration	Atlantic salmon ( <i>Salmo salar</i> )	[44]
TMA-N	Silver carp ( <i>Hypophthalmichthys molitrix</i> )	[45]
Texture profile analysis (TPA) parameters	Crucian carp ( <i>Carassius carassius</i> )	[46]
Drip loss and pH	Atlantic salmon ( <i>Salmo salar</i> )	[47]
Freshness (days)	Atlantic salmon ( <i>Salmo salar</i> )	[48]
Color attributes (L*, a*, b*)	Atlantic salmon ( <i>Salmo salar</i> )	[49]
Microbial loads	Rainbow trout ( <i>Oncorhynchus mykiss</i> )	[50]
Cadaverine	Chub mackerel ( <i>Scomber japonicus</i> )	[51]