

doi: 10.4081/ijfs.2025.13501

SUPPLEMENTARY MATERIAL

EN 1785:2003 method for the identification of ionizing treatment in poultry meat products: optimization of the accelerated solvent extraction procedure

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Key words: food irradiation, food preservation, meat, 2-DCB, accelerated solvent extraction.

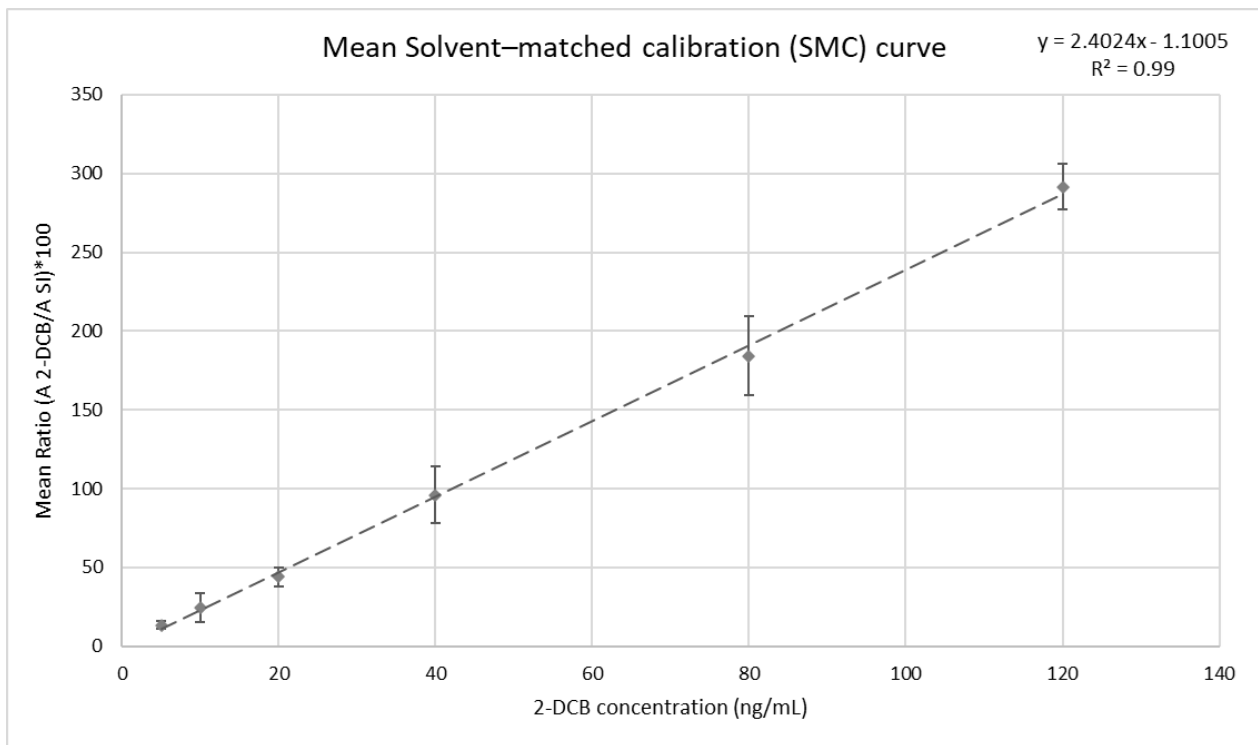
Supplementary Table 1. List of the European standard procedures for the detection of irradiated food.

CEN Standard procedures	Method	Application
EN 1784:2003 Detection of irradiated food containing fat – Gas chromatographic analysis of hydrocarbons	Chemical confirmatory method	Chicken, Pork, Beef Avocados, Mangoes, Papayas, Camembert
EN 1785:2003 Detection of irradiated food containing fat – Gas chromatographic/mass spectrometric analysis of 2-alkylcyclobutanones	Chemical confirmatory method	Meat, Liquid whole egg
EN 1786:1996 Detection of irradiated food containing bone – Method by ESR Spectroscopy	Physical confirmatory method	Food containing bone
EN 1787:2022 Detection of irradiated foodstuff containing cellulose by ESR spectroscopy	Physical screening/confirmatory method	Food containing, cellulose, (pistachios, paprika, strawberries)
EN 1788:2001 Thermoluminescence detection of irradiated food from which silicate minerals can be isolated	Physical confirmatory method	Herbs, spices, mollusks, crustaceans, fruits and vegetables
EN 13708:2022 Detection of irradiated foodstuff containing crystalline sugar by ESR spectroscopy	Physical confirmatory method	Food containing, crystalline sugar, (dried figs, mango, papaya and raisins)
EN 13751:2009 Detection of irradiated food using photostimulated luminescence	Physical screening method	Herbs, spices, mollusks and crustaceans
EN 13783:2001 Detection of irradiated food using Direct Epifluorescent Filter Technique/Aerobic Plate Count (DEFT/APC) – Screening method	Microbiological screening method	Herbs and spices
EN 13784:2001 DNA Comet Assay for the detection of irradiated foodstuffs – Screening method	Biological screening method	Meats, fish, seeds, dried fruits, spices
EN 14569:2004 Microbiological screening for irradiated food using LAL/GNB procedures	Microbiological screening method	Meats, wings of fresh, chilled or frozen carcasses with or without skin

Supplementary Table 2. Solvent-matched calibration curve.

Solvent-matched calibration (SMC) curve	2-DCB concentration (ng/mL)	Area 98 2-DCB (A 2-DCB)	Area 98 SI (A SI)	Ratio (A 2-DCB/A SI)*100
SMC 1	5	346670	2175001	16
	10	861271	2465756	35
	20	659006	1400494	47
	40	1832503	1581832	116
	80	2917853	1377549	212
	120	4493330	1477175	304
SMC 2	5	174586	1339670	13
	10	251595	1184249	21
	20	689906	1438494	48
	40	1478743	1591330	93
	80	2951858	1661730	178
	120	4884621	1659131	294
SMC 3	5	179959	1633659	11
	10	307991	1726502	18
	20	646000	1745076	37
	40	1375250	1726828	80
	80	2840319	1735003	164
	120	4837814	1753119	276

	2-DCB concentration (ng/mL)	Mean Ratio	Standard deviation
Mean curve	5	13	2
	10	25	9
	20	44	6
	40	96	18
	80	184	25
	120	292	14



Supplementary Figure 1. Mean solvent-matched calibration curve.