

IMPLANTS, DEVICES AND DENTAL RESTORATIONS

NB Exact metal composition may vary

DENTAL

Amalgams Zinc is also present but is not tested in MELISA	Crowns non noble stainless steel, nickel/chromium or cobalt/chromium	Crowns noble Precise alloys used vary between dental laboratories
Copper	Beryllium	Gold
Inorganic mercury	Chromium	Platinum
Methylmercury	Cobalt	Silver
Nickel	Molybdenum	Palladium
Silver	Manganese	Indium
Tin	Nickel	Ruthenium
	Tungsten	Iridium
		Gallium
Cobalt-Chromium implants	Titanium Implant (dental)	Bridge (Maryland)
Cobalt	Titanium dioxide	Cobalt
Chromium	Titanium sulphate	Chromium
Molybdenum	Aluminium	Molybdenum
Tungsten	Vanadium	Nickel
Manganese	Nickel trace (0.03%)	Tungsten
Nickel		
Root fillings	Braces/Retainers	
Bismuth	Chromium	
Tantalum	Manganese	
Cadmium – older restorations	Molybdenum	
Formaldehyde – older restorations	Nickel	

ORTHOPAEDIC AND CV

Titanium Implant (spinal)	Surgical steel/ stainless steel	Cobalt Chrome TKR /THR
Titanium dioxide	Chromium	Cobalt
Titanium sulphate	Molybdenum	Chromium
Aluminium	Manganese	Manganese
Vanadium	Nickel	Tungsten
Nickel trace (0.03%)	Tungsten	Nickel
Tantalum and Niobium may be present		Molybdenum

Cement	Oxinium***	Stents
Methyl methacrylate	Niobium	Stent alloys pdf
Benzoyl peroxide *	Zirconium**	
	Chromium	
	Tin	

Pacemakers	Essure
Platinum	Essure Device pdf
Iridium	
Titanium dioxide	
Titanium sulphate	
Vanadium	
Aluminium	
Nickel - trace	

ENVIRONMENTAL AND MEDICATION

Lead - from water pipes	Palladium - motorways	Methyl mercury – fish
Cadmium - from polluted areas	Inorganic mercury - crematorium	Aluminium - vaccines adverse effect
Gluten** – if digestive issues present	Titanium dioxide – coating on vitamins and medication	Thimerosal – some vaccines and flu vaccine

* Only tested at Swiss laboratory

** Developed for research only – not clinically validated

*** From [Smith&Nephew](#)

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