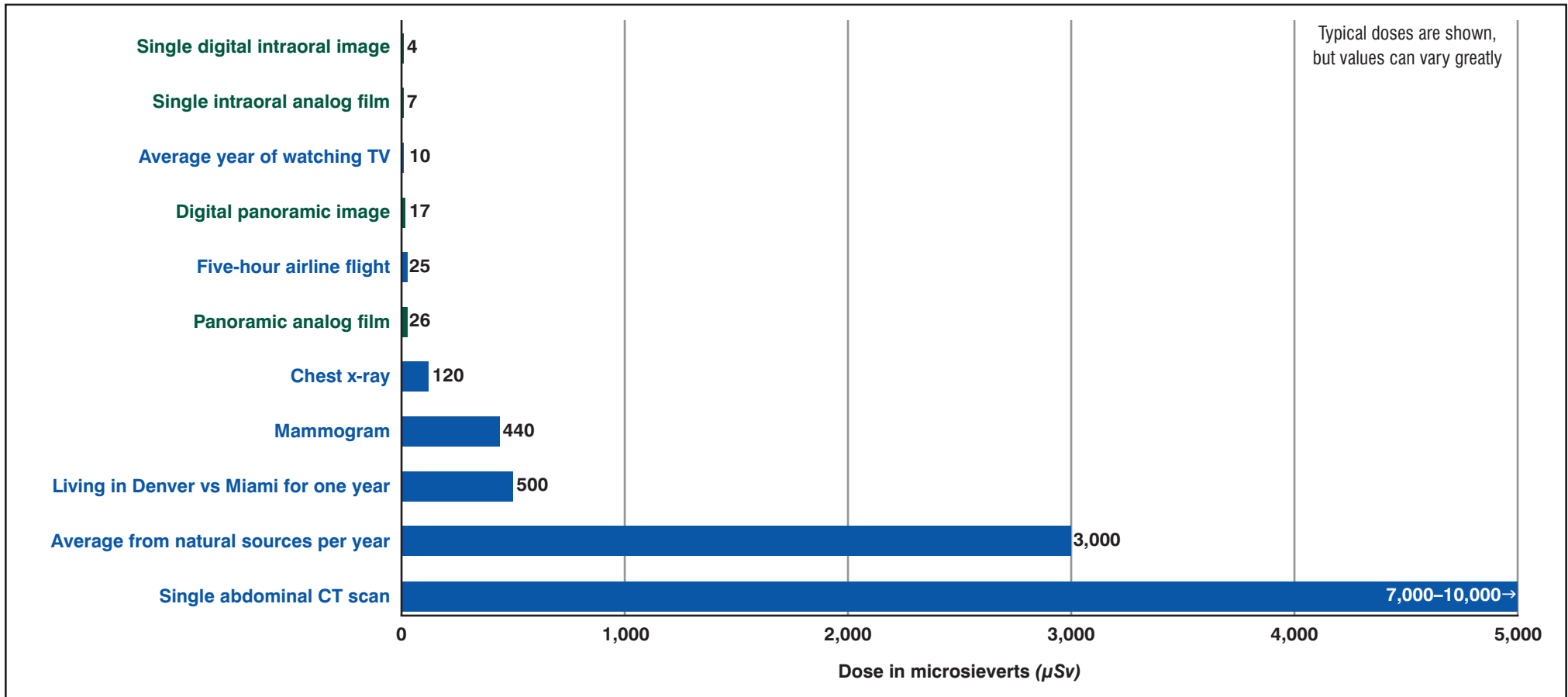


2020 Therapeutic Materials that Remain in the Oral Cavity Indefinitely in TRAC Research Study

TRAC's Material Category	Brand	Company	Product Description	Time in TRAC Studies
Antibacterial	• Infinix	Nobio	Antimicrobial resin-based composite for universal use.	Starts Spring 2020
Buffer Capacity	-----	-----	-----	-----
Calcium & Phosphate Ion Releasing	• Activa	Pulpdent	Claims to release fluoride, calcium, & phosphate ions to stimulate apatite formation & remineralization at the material-tooth interface. <i>(TRAC Research could not confirm these claims in vivo or in vitro.)</i>	3.5 years
	• Predicta Bulk (HV & LV viscosities)	Parkell	Claims to release fluoride, calcium, & phosphate ions to stimulate apatite formation & remineralization at the material-tooth interface. <i>(TRAC Research working on validation now.)</i>	Less than 1 year
High Fluoride Ion Releasing	• Equia Forte Fil	GC	<u>Conventional glass ionomer</u> releases fluoride ion in high amounts and over long period of time (years) & seals at material-tooth interface for at least 3 years. <i>(TRAC Research has validated above both in vivo and in vitro.)</i>	3.5 years
	• Equia Forte HT Fil	GC	Same as Equia Forte above, but translucency and strength improved. <i>(TRAC Research working on validation now.)</i>	Less than 1 year
	• Fuji Automix LC	GC	<u>Resin-modified glass ionomer</u> releases fluoride ion in high amounts and over long period of time (years), and does not require triturator for mixing. <i>(TRAC Research working on validation now.)</i>	Less than 1 year
	• Ketac Universal	3M	<u>Conventional glass ionomer</u> using nanotechnology releases fluoride ion in high amounts and over long period of time (years) & seals at material-tooth interface for at least 3 years. <i>(TRAC Research has validated above both in vivo and in vitro.)</i>	3.5 years
	• Smart Advantage	Elevate	<u>Conventional glass ionomer</u> with opaquing added to minimize dark stain of silver diamine fluoride (SDF) when it is applied first to "arrest" caries. Releases fluoride ion. <i>(TRAC Research working on validation now.)</i>	Less than 1 year



Comparison of Common Radiation Doses

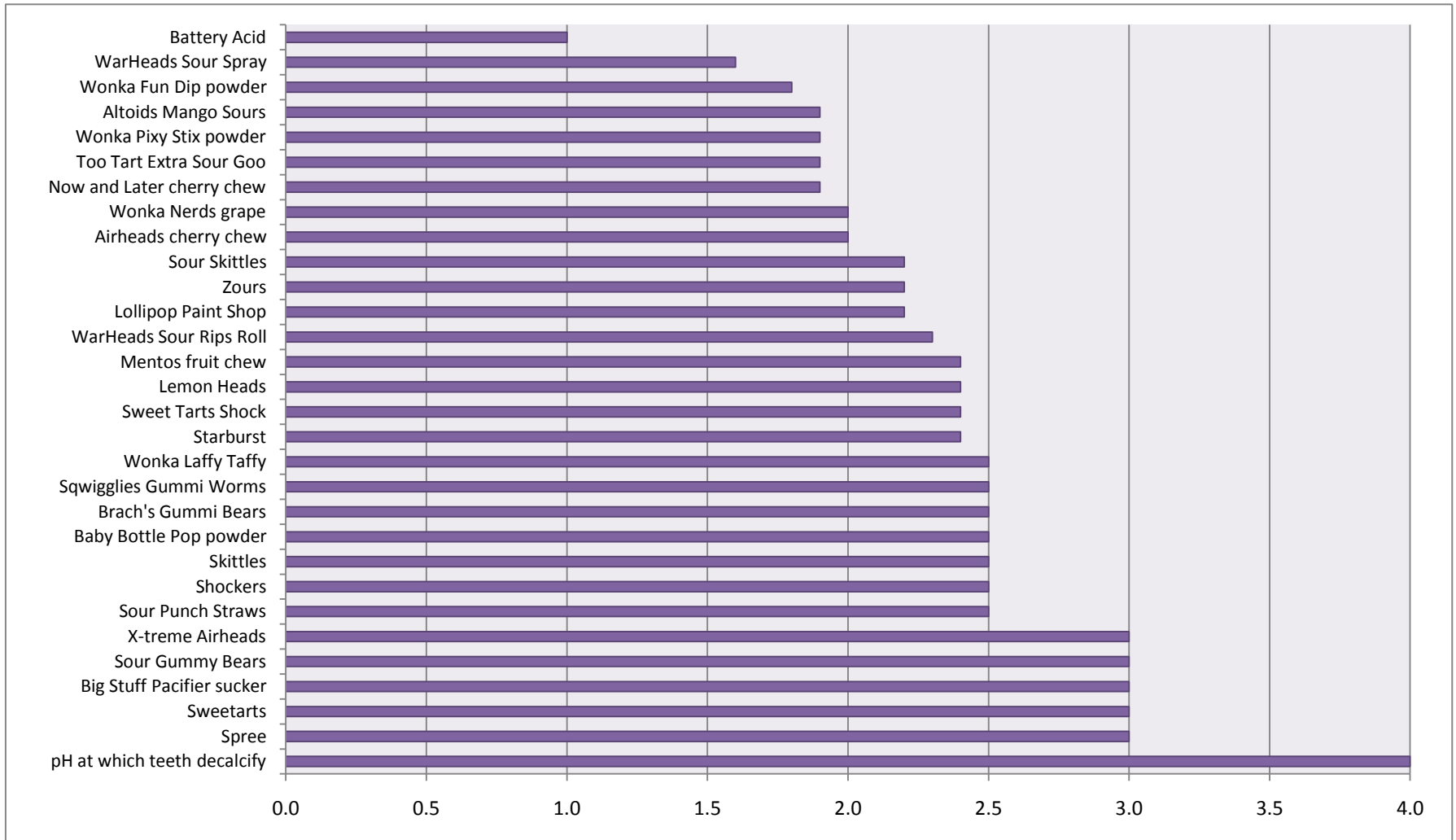


Dose is in microsieverts (μSv), a unit which expresses the effect of radiation on body tissues

Recommended dose limits of the NCRP (*National Council on Radiation Protection and Measurement*)

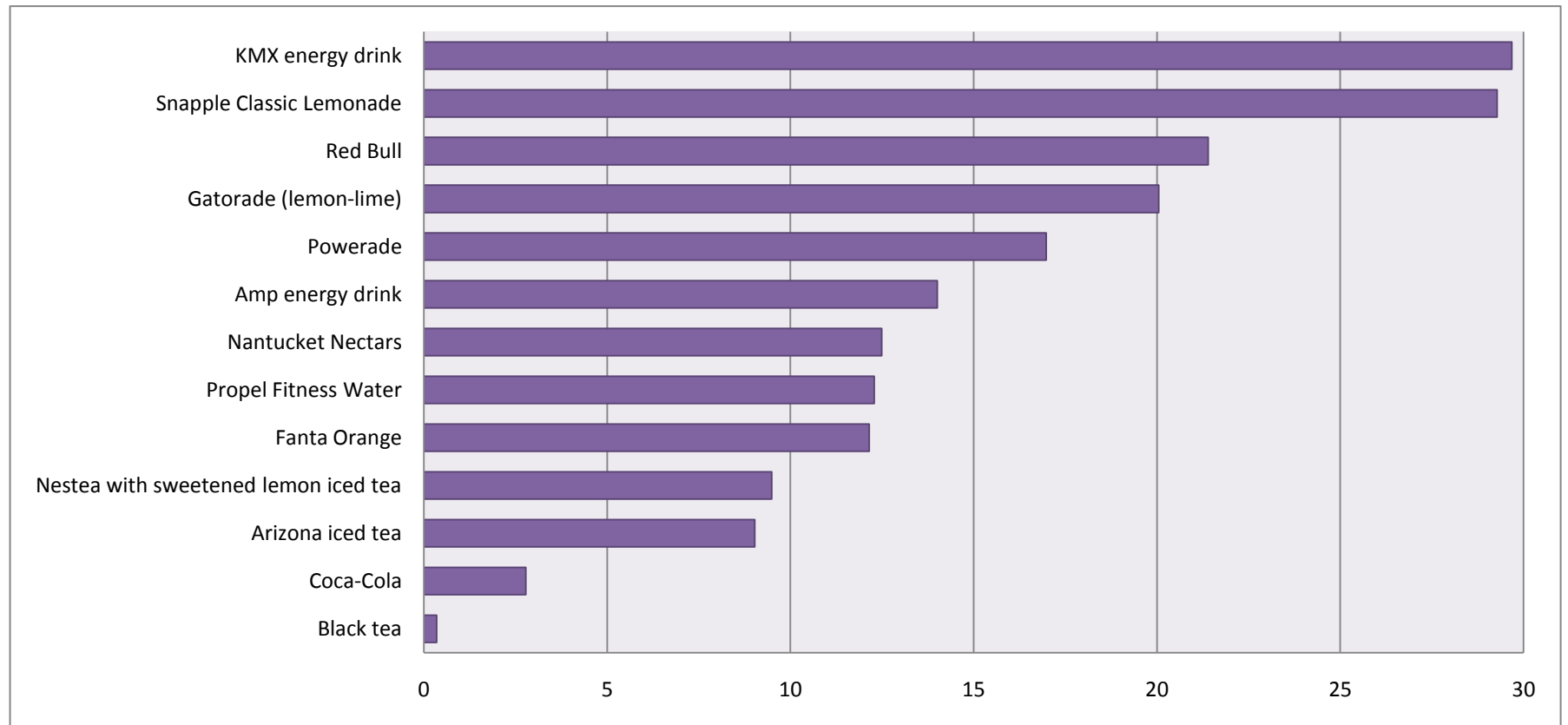
- 50,000 μSv /year for clinical staff working with radiation
- 1,000 μSv /year for general public (e.g., family member in waiting area or accompanying patient in operatory)

pH Values For Sour Candy



One gram candy / 5 ml water used in testing

Most Harmful Drinks



Mg enamel destroyed in 14 days of continuous exposure