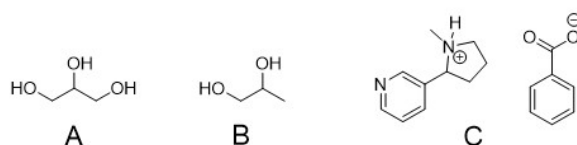
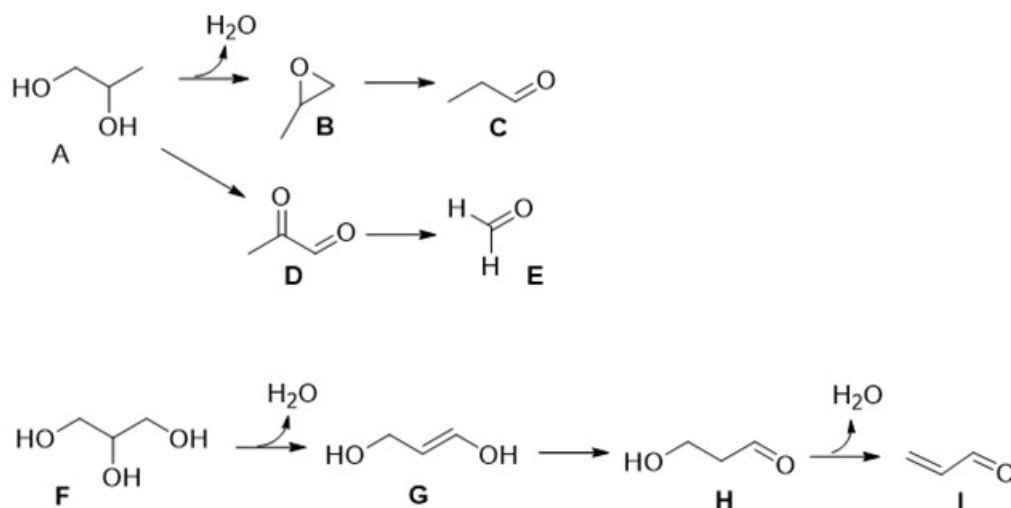


**Figure 1:** Glycerine (propane-1,2,3-triol, A), propylene glycol (propane-1,2-diol, B) and nicotine benzoate (C).



**Figure 2:** Top: thermal decomposition of propylene glycol (A) via propylene oxide (B) to propionaldehyde (C) and via methylglyoxal (D) to formaldehyde (E).<sup>3</sup> Bottom: thermal decomposition of glycerine (F) via 1,3-dihydroxypropane (G) and 3-hydroxypropanal (H) to acrolein (I).<sup>5</sup>



**Table 1:** Approximate yields of aldehydes from cigarette smoke and calculated doses for a 70kg human assuming the entire cigarette is consumed compared with equivalent data for vaping.<sup>9,31,32</sup>

Aldehyde	Smoking		Vaping	
	mcg/cigarette	Dose mcg/kg body weight	mcg/puff	Dose mcg/kg body weight
Acrolein	220–468	3.1–6.7	0.012–1.37	0.0026–0.29
Formaldehyde	87–243	1.2–3.5	0.13–24.4	0.028–5.2
Acetaldehyde	1,110–2,040	15.9–29.1	0.02–22.5	0.0043–4.8
Propionaldehyde	87–176	1.2–2.5	0.19–12.1	0.0041–2.6