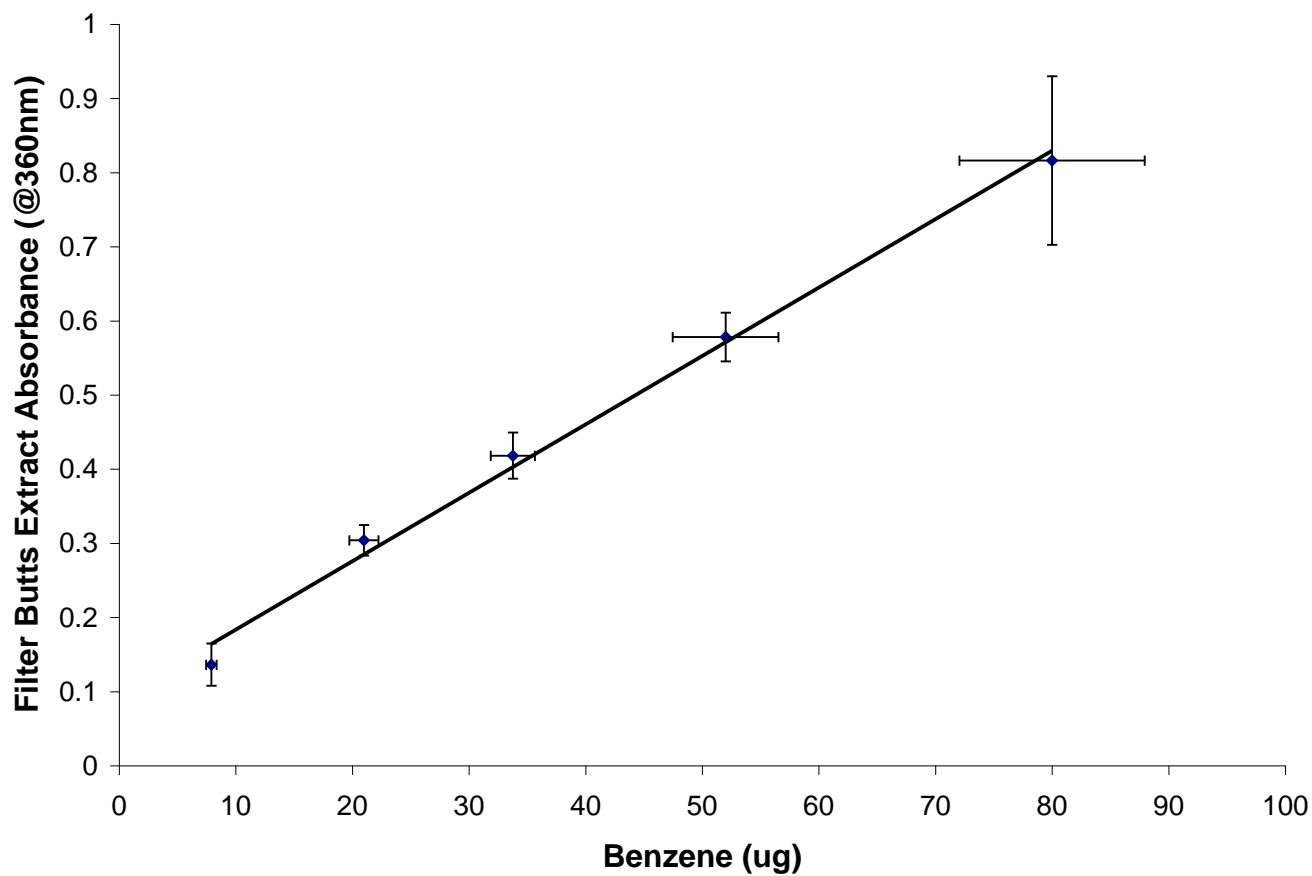
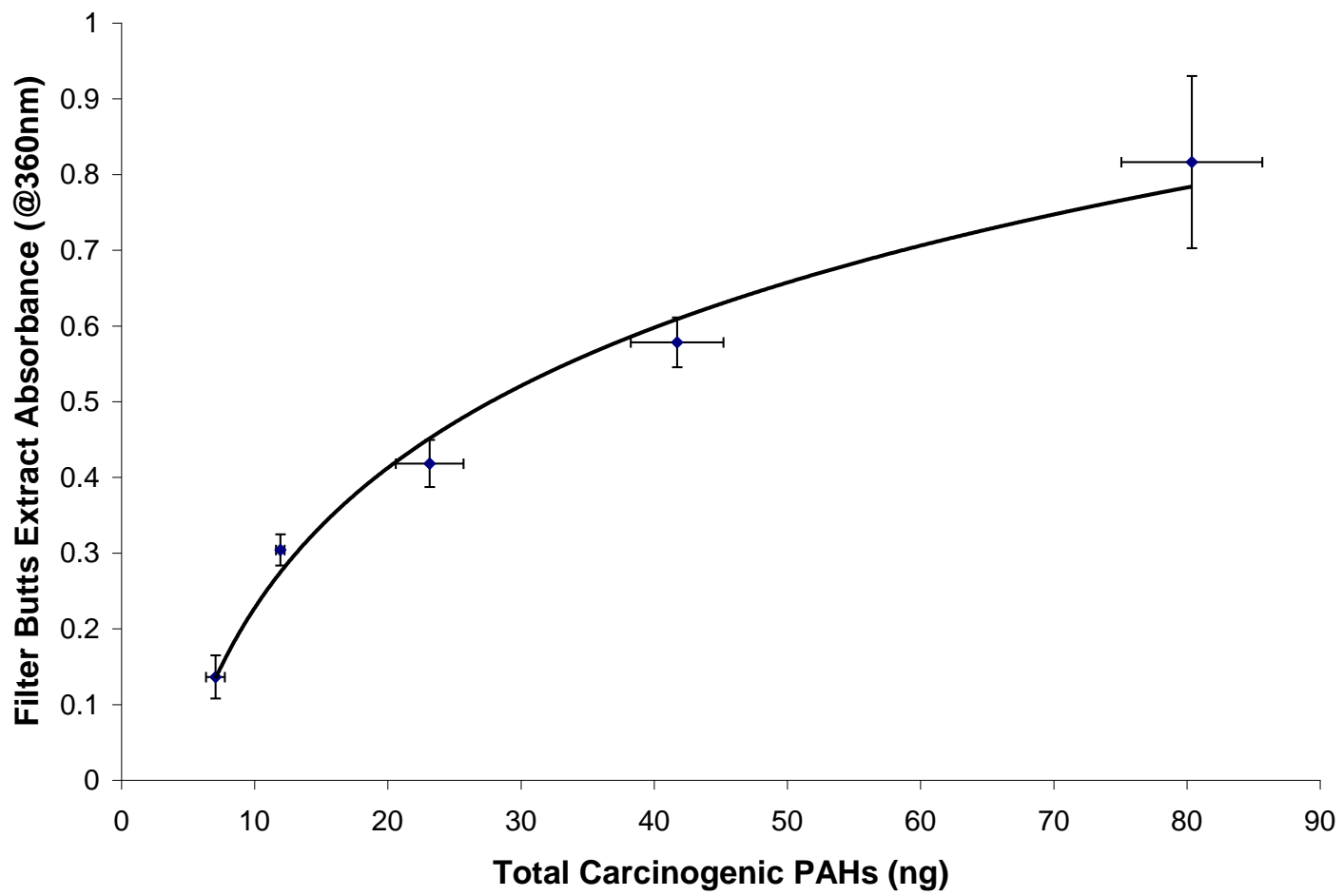


Supplementary Material

Supplementary 1. Excellent correlation exists between filter butt extract absorbance and mainstream smoke delivery of benzene for 2R4F research cigarettes. Errors bars represent 95% confidence levels; solid line is the linear least squares fit. N=5; $R^2=0.9941$.



Supplementary 2. Correlation of filter butt extract absorbance to the combined mainstream smoke delivery of four carcinogenic polycyclic aromatic hydrocarbons (PAHs) for 2R4F research cigarettes. Errors bars represent 95% confidence levels; solid line is logarithmic best fit. N=5; $R^2=0.9854$.



Supplementary 3. Slopes measured for the curves relating nicotine deliveries to the measured absorbance at 360 nm of the extracted smoke particulate matter from the filters of selected domestic cigarette brands.

	Length	Filter	Vent	Tobacco Wt.	ISO Nicotine	
Manufacturer	(mm)	(mm)	(%)	(g)	(mg/cig)	Slope
A	100	26	13	0.75	1.25	0.538
	100	31	30	0.75	0.90	0.625
	100	32	18	0.74	1.10	0.467
	100	32	55	0.70	0.57	0.801
	83	27	18	0.62	0.90	0.449
	83	27	55	0.58	0.54	0.757
	83	27	30	0.62	0.83	0.748
	83	20	13	0.70	1.16	0.693
	72	19	13	0.53	1.00	0.423
	72	19	30	0.56	0.70	0.739
B	100	27	30	0.78	0.96	0.580
	83	27	8	0.63	0.92	0.496