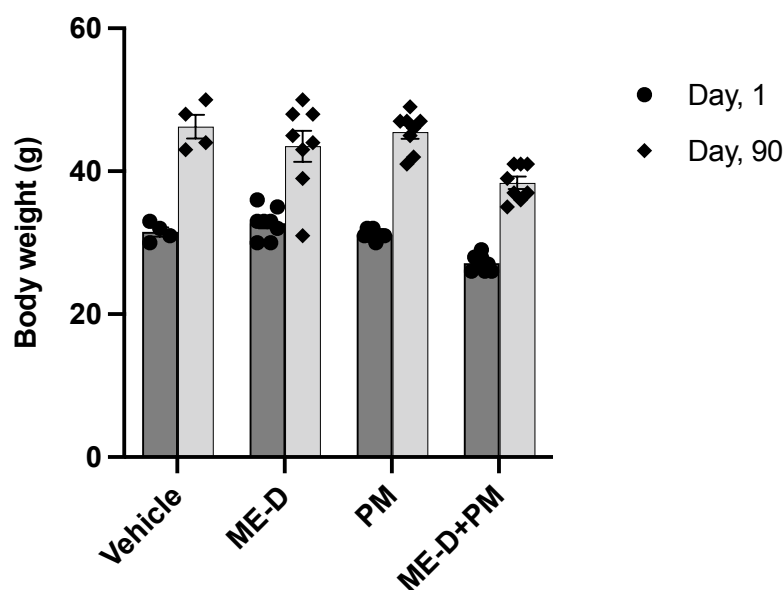


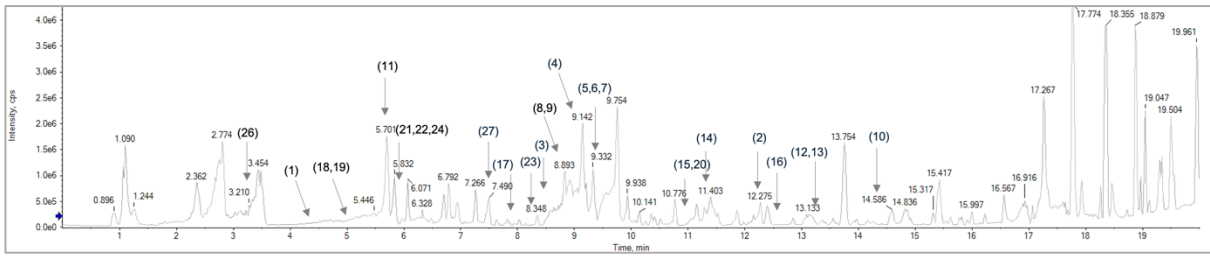
Supplementary Data:

Supplementary Table 1- List of primers used in the study.

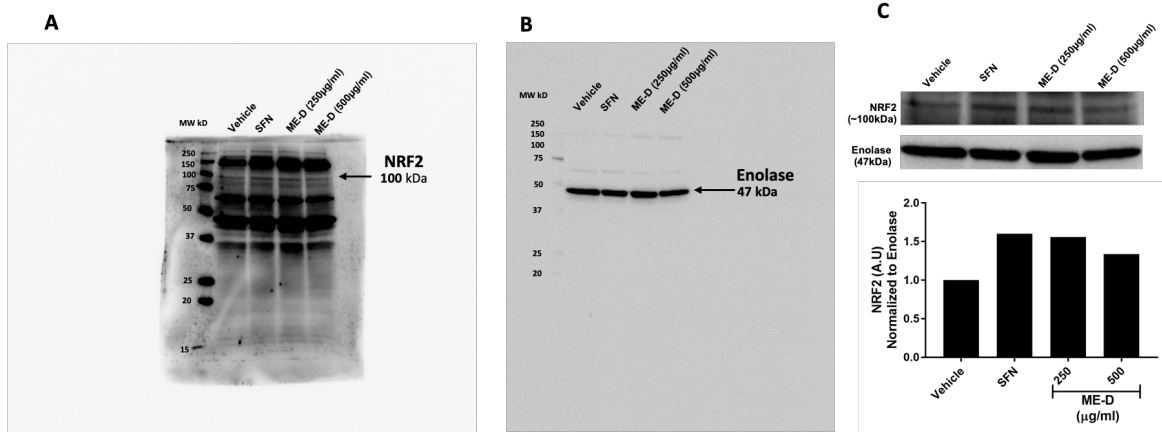
Gene	Primer sequence		Gen Bank Number
	Forward 5'-3'	Reverse 5'-3'	
<i>hNQO1</i>	TGCAGCGGCTTTGAAGAAGAAAGG	TCGGCAGGATACTGAAAGTTCGCA	NM_001025434.2
<i>hHMOX1</i>	ATTGCCAGTGCCACCAAGTTCAAG	ACGCAGTCTTGGCCTCTTCTATCA	NM_002133.3
<i>hGCLC</i>	AAGCCATTCACTCCAGATTTTACC	ACAACAACTTCAACGCAAAGC	NM_001197115.2
<i>hβ-ACTIN</i>	TTCTACAATGAGCTGCGTGTG	GGGGTGTGAAGGTCTCAAA	NM_001101.5
<i>mNqo1</i>	AGGATGGGAGGTACTCGAATC	AGGCGTCCTTCCCTTATATGCTA	NM_008706.5
<i>mHmox1</i>	GGTGATGGCTTCTTGTAACC	AGTGAGGCCCATACCAGAAG	NM_010442.2
<i>mGclc</i>	ATGATAGAACACGGGAGGAGAG	TGATCCTAAAGCGATTGTTCTTC	NM_010295.2
<i>mIi-6</i>	TTCCATCCAGTTGCCTTCTTGG	TTCTCATTTCCACGATTTCCAG	NM_001314054.1
<i>mIi-1β</i>	AACCTGCTGGTGTGTGACGTTT	CAGCACGAGGCTTTTTTGTGT	NM_008361.4
<i>mTnf-α</i>	GGCATGGATCTCAAAGACAACC	CAGGTATATGGGCTCATACCAG	NM_001278601.1
<i>mNos2</i>	GGCAGCCTGTGAGACCTTTG	CATTGGAAGTGAAGCGTTTCG	NM_001313922.1
<i>Mβ-actin</i>	GGCTGTATTCCCCTCCATCG	CCAGTTGGTAACAATGCCATGT	NM_007393.5



Supplementary Fig.1. Body weight gain in PM-exposed mice co-administered with ME-D or vehicle for three months. Swiss Albino mice were exposed to PM or vehicle alternate days weekly three times for 3-months. Mice were also concurrently treated with ME-D or PBS by oral gavage (weekly for three days). Body weight was recorded on day1 and day 90. Data represented as mean \pm SEM; (N=4-7/group). $^{\S}P < 0.05$, $^{\#}P < 0.01$, and $^*P < 0.001$ compared with the vehicle control.



Supplementary Fig.2. LC-HRMS biochemical profile of ME-D dietary preparation. The number in bracket corresponds to key bioactive compounds listed in Table 2.



Supplementary Fig.3. Uncropped images (A-B) and cropped image with quantification (C) of the immunoblot used in Fig.3F in the main text. Immunoblot of whole cell extracts prepared from BEAS2B cells after treatment with sulforaphane (SFN), ME-D or vehicle using anti-Nrf2 antibody (~100kDa) (A). The blot was stripped and re-probed with anti-enolase (B).