

Supplementary Table 1. Proband-sibling analysis of interactions between CYP1A2 -154A>C and red meat doneness level variables

	Colorectal cancer					Colon cancer					Rectal cancer					Heterog. p-value ^d
	Pb/Sb ^a		OR ^b	95% CI	p-value	Pb/Sb ^a		OR ^b	95% CI	p-value	Pb/Sb ^a		OR ^b	95% CI	p-value	
	<i>RM</i>	<i>WD</i>				<i>RM</i>	<i>WD</i>				<i>RM</i>	<i>WD</i>				
Level of doneness of meat in the inside (rare-medium = <i>RM</i> or well-done = <i>WD</i>)																
A/A	95/103	70/81	0.89	0.55-1.43	0.632	55/64	45/48	1.14	0.61-2.13	0.682	33/29	16/23	0.56	0.23-1.33	0.187	
A/C	49/75	68/69	1.58	0.95-2.63	0.076	30/41	39/40	1.36	0.71-2.61	0.347	12/21	17/17	1.72	0.59-5.00	0.322	
C/C	9/11	15/17	1.05	0.35-3.10	0.933	6/7	9/11	1.04	0.26-4.13	0.958	3/3	3/4	0.61	0.08-4.91	0.640	
per A allele			0.96	0.61-1.52	0.855			1.18	0.65-2.17	0.586			0.61	0.26-1.42	0.251	
per C allele			1.29	0.87-1.91	0.202			1.23	0.74-2.06	0.428			1.02	0.49-2.12	0.957	
<i>Interaction OR</i>			1.35	0.82-2.20	0.237			1.04	0.54-1.99	0.905			1.70	0.70-4.01	0.244	0.574
Level of doneness of red meat from outside (light-medium brown = <i>LMB</i> or heavily browned = <i>HB</i>)																
	Pb/Sb ^a		OR ^c	95% CI	p-value	Pb/Sb ^a		OR ^c	95% CI	p-value	Pb/Sb ^a		OR ^c	95% CI	p-value	Heterog. p-value ^d
	<i>LMB</i>	<i>HB</i>				<i>LMB</i>	<i>HB</i>				<i>LMB</i>	<i>HB</i>				
A/A	115/140	50/44	1.35	0.79-2.31	0.270	65/83	35/29	1.65	0.83-3.29	0.153	40/43	9/9	0.91	0.33-2.49	0.853	
A/C	84/93	33/51	0.75	0.42-1.32	0.316	49/48	20/33	0.57	0.26-1.24	0.155	22/31	7/7	1.69	0.48-5.93	0.415	
C/C	14/20	10/7	2.24	0.71-7.10	0.170	10/13	5/4	1.69	0.39-7.23	0.481	2/6	4/1	-	-	-	
per A allele			1.14	0.68-1.89	0.621			1.37	0.71-2.63	0.341			0.78	0.29-2.07	0.614	
per C allele			1.09	0.72-1.66	0.672			0.95	0.55-1.64	0.866			2.45	0.84-7.13	0.100	
<i>Interaction OR</i>			0.96	0.56-1.66	0.893			0.70	0.35-1.39	0.305			3.16	0.85-11.7	0.086	0.154

^aPb= probands; Sb= siblings; ^bOR for well-done red meat within each genotype subgroup with rare-medium as referent group; ^cOR for heavily browned red meat within each genotype subgroup with light-medium brown as referent group; ^dcolon versus rectum heterogeneity test.

Supplementary Table 2. Proband-sibling analysis of interactions between GSTP1 Ile105Val and number of servings of cooked poultry per week

	Colorectal cancer					Colon cancer					Rectal cancer					Heterog. p-value ^c
	Pb/Sb ^a		OR ^b	95% CI	p-value	Pb/Sb ^a		OR ^b	95% CI	p-value	Pb/Sb ^a		OR ^b	95% CI	p-value	
	≤ 3	> 3				≤ 3	> 3				≤ 3	> 3				
A/A	85/123	42/48	1.32	0.76-2.27	0.324	57/81	21/25	1.29	0.61-2.70	0.510	15/31	18/16	2.68	0.97-7.44	0.058	
A/C	104/100	33/43	0.76	0.42-1.37	0.361	64/60	23/25	0.89	0.43-1.81	0.741	29/24	8/11	0.70	0.19-2.52	0.581	
C/C	33/31	5/12	0.30	0.08-1.17	0.084	13/15	3/7	0.25	0.03-2.36	0.227	13/12	1/3	0.24	0.02-3.4	0.293	
per A allele			1.30	0.78-2.18	0.320			1.31	0.65-2.62	0.457			2.10	0.86-5.14	0.105	
per C allele			0.73	0.47-1.13	0.161			0.84	0.48-1.48	0.546			0.75	0.31-1.85	0.533	
<i>Interaction OR</i>			<i>0.56</i>	<i>0.31-1.01</i>	<i>0.054</i>			<i>0.64</i>	<i>0.29-1.43</i>	<i>0.280</i>			<i>0.36</i>	<i>0.11-1.14</i>	<i>0.082</i>	<i>0.709</i>

^aPb= proband, Sb= sibling; ^bOR for > 3 servings of red meat per week within each genotype subgroup with ≤ 3 servings per week as referent group; ^ccolon versus rectum heterogeneity test.