**Table S1:** Adjusted\* odds ratios (ORs) and 95% confidence interval for the association of red meat, red meat subtypes, and processed meats with the risk of colorectal cancer (all sites) stratified by ethnic group in Israel

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Jews** | **Q-1†** | **Q-2** | **Q-3** | **Q-4** |
| Red meat all | Reference | 0.95 (0.84-1.07) | 1.02 (0.90-1.17) | 1.13 (0.98-1.31) |
| Beef | Reference | 0.96 (0.85-1.08) | 0.96 (0.80-1.16) | 0.95 (0.82-1.11) |
| Lamb | Reference ‡ | | | 1.28 (1.09-1.50) |
| Pork | Reference ‡ | | | 1.44 (1.24-1.67) |
| Processed meat | Reference‡ | 1.21 (1.06-1.37) | 1.27 (1.11-1.45) | 1.21 (1.06-1.38) |
| **Arabs** | **Q-1†** | **Q-2** | **Q-3** | **Q-4** |
| Red meat all | Reference | 0.66 (0.48-0.91) | 0.66 (0.46-0.93) | 0.69 (0.47-1.01) |
| Beef | Reference | 1.0 (0.72-1.40) | 0.71 (0.51-0.98) | 0.65 (0.45-0.93) |
| Lamb | Reference | | 1.10 (0.83-1.45) | 1.17 (0.82-1.68) |
| Pork | Reference ‡ | | | 1.07 (0.73-1.57) |
| Processed meat | Reference ‡ | | 1.14 (0.88-1.48) | 0.80 (0.55-1.17) |

**\***: adjusted for age, sex, BMI (<25, 25-30, >30 kg/m2), family history for CRC (first degree relative), smoking (never, former, current), education (≤12 years vs. >12 years), sport activity (yes vs. no), total energy intake, fibers, calcium, vitamin D, and folate intake, alcohol intake (any vs. none), vegetables consumption (≥ 3 vs. <3 serving/day), fruit consumption (≥ 3 vs. <3 serving/day), regular aspirin intake (daily low dose for at least 1 year)**,** and intake of each meat type was mutually adjusted for other meats intake **†**: ethnicity specific quartiles (servings/week) according to the distribution in in controls (Jews vs. Arab)  
**‡**: the reference categories represent no consumption

**Table S2:** Adjusted\* odds ratios (ORs) and 95% confidence interval for the association of red meat, red meat subtypes, and processed meats with the risk of colorectal cancer stratified by ethnic group in Israel and presented separately by tumor site

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Right colon** | | | | |
| **Jews**  *# of cases 1510* | **Q-1†** | **Q-2** | **Q-3** | **Q-4** |
| Red meat all | Reference | 0.93 (0.79-1.11) | 1.08 (0.90-1.30) | 1.11 (0.91-1.36) |
| Beef | Reference | 0.92 (0.78-1.09) | 0.98 (0.76-1.25) | 0.92 (0.74-1.13) |
| Lamb | Reference ‡ | | | 1.51 (1.23-1.87) |
| Pork | Reference ‡ | | | 1.30 (1.05-1.60) |
| Processed meat | Reference‡ | 1.30 (1.09-1.55) | 1.24 (1.03-1.50) | 1.25 (1.04-1.51) |
| **Arabs**  *# of cases 224* | **Q-1†** | **Q-2** | **Q-3** | **Q-4** |
| Red meat all | Reference | 0.67 (0.42-1.07) | 0.61 (0.36-1.03) | 0.84 (0.49-1.45) |
| Beef | Reference | 1.04 (0.65-1.68) | 0.58 (0.35-0.96) | 0.74 (0.44-1.24) |
| Lamb | Reference | | 1.08 (0.72-1.63) | 1.4 (0.87-2.35) |
| Pork | Reference ‡ | | | 1.38 (0.80-2.38) |
| Processed meat | Reference ‡ | | 1.10 (0.75-1.61) | 1.02 (0.59-1.76) |
| **Left colon** | | | | |
| **Jews**  *# of cases 1858* | **Q-1†** | **Q-2** | **Q-3** | **Q-4** |
| Red meat all | Reference | 0.97 (0.83-1.14) | 1.0 (0.84-1.19) | 1.13 (0.94-1.37) |
| Beef | Reference | 0.97 (0.83-1.14) | 0.97 (0.77-1.23) | 0.96 (0.79-1.17) |
| Lamb | Reference ‡ | | | 1.17 (0.95-1.43) |
| Pork | Reference ‡ | | | 1.51 (1.25-1.81) |
| Processed meat | Reference‡ | 1.26 (1.06-1.49) | 1.47 (1.24-1.75) | 1.30 (1.10-1.56) |
| **Arabs**  *# of cases 339* | **Q-1†** | **Q-2** | **Q-3** | **Q-4** |
| Red meat all | Reference | 0.77 (0.51-1.18) | 0.84 (0.53-1.32) | 0.76 (0.46-1.24) |
| Beef | Reference | 1.25 (0.82-1.92) | 0.88 (0.57-1.34) | 0.65 (0.40-1.05) |
| Lamb | Reference | | 1.23 (0.87-1.77) | 1.17 (0.73-1.86) |
| Pork | Reference ‡ | | | 1.22 (0.74-2.0) |
| Processed meat | Reference ‡ | | 1.09 (0.78-1.52) | 0.70 (0.42-1.16) |
| **Rectum** | | | | |
| **Jews**  *# of cases 1024* | **Q-1†** | **Q-2** | **Q-3** | **Q-4** |
| Red meat all | Reference | 0.93 (0.76-1.13) | 0.95 (0.77-1.18) | 1.16 (0.93-1.46) |
| Beef | Reference | 0.98 (0.81-1.18) | 0.91 (0.68-1.22) | 0.94 (0.74-1.19) |
| Lamb | Reference ‡ | | | 1.30 (1.04-1.69) |
| Pork | Reference ‡ | | | 1.43 (1.13-1.80) |
| Processed meat | Reference‡ | 1.18 (0.96-1.44) | 1.09 (0.88-1.36) | 1.12 (0.91-1.38) |
| **Arabs**  *# of cases 242* | **Q-1†** | **Q-2** | **Q-3** | **Q-4** |
| Red meat all | Reference | 0.60 (0.38-0.94) | 0.59 (0.35-0.97) | 0.55 (0.32-0.96) |
| Beef | Reference | 0.79 (0.49-1.29) | 0.70 (0.44-1.12) | 0.49 (0.29-0.85) |
| Lamb | Reference | | 1.18 (0.79-1.76) | 1.13 (0.68-1.89) |
| Pork | Reference ‡ | | | 0.76 (0.42-1.36) |
| Processed meat | Reference ‡ | | 1.22 (0.84-1.77) | 0.83 (0.48-1.43) |

**\***: adjusted for age, sex, BMI (<25, 25-30, >30 kg/m2), family history for CRC (first degree relative), smoking (never, former, current), education (≤12 years vs. >12 years), sport activity (yes vs. no), total energy intake, fibers, calcium, vitamin D, and folate intake, alcohol intake (any vs. none), vegetables consumption (≥ 3 vs. <3 serving/day), fruit consumption (≥ 3 vs. <3 serving/day), regular aspirin intake (daily low dose for at least 1 year), and intake of each meat type was mutually adjusted for other meats intake  
**†**: ethnicity specific quartiles (servings/week) according to the distribution in in controls (Jews vs. Arab)  
**‡**: the reference categories represent no consumption