**Table S1: Household Income Category**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Income Category** | **Lipid-Adjusted**  **GM (95% CI) (µg/kg lipid)\*** | **p-value\*\*** |
| ∑PCBs | 0-<$10 000  $10 000 - <$30 000  $30 000 - <$60 000  $60 000 - <$80 000  $80 000 - <$100 000  ≥$100 000 | 88.9 (65.4, 120.8)  120.8 (98.8, 147.8)  120.1 (108.1, 133.3)  96.6 (82.2, 113.5)  86.4 (70.9, 105.3)  102.3 (84.5, 124.0) | NS  NS  NS  NS  NS |
| p,p’-DDE | 0-<$10 000  $10 000 - <$30 000  $30 000 - <$60 000  $60 000 - <$80 000  $80 000 - <$100 000  ≥$100 000 | 137.5 (73.7, 256.3)  231.6 (167.4, 320.3)  179.0 (146.1, 219.1)  140.4 (104.4, 188.8)  110.1 (86.2, 140.6)  127.6 (103.4, 157.5) | NS  NS  NS  NS  NS |

\* Plasma concentrations adjusted for serum lipids.

\*\* Adjusted for multiple comparisons. For PCBs, no pairwise comparison was significant. For p,p’-DDE, the following were statistically different: category 5 vs. 2 (p=0.018), category 5 vs. 3 (p=0.035), and category 6 vs. 2 (p=0.017).

CI = confidence interval; DDE = dichlorodiphenyldichloroethylene; GM = geometric mean; NS = not significant; PCB = polychlorinated biphenyl

**Table S2: Household Income Adequacy**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Income Adequacy** | **Lipid-Adjusted**  **GM (95% CI) (µg/kg lipid)\*** | **p-value\*\*** |
| ∑PCBs | Lowest income  Lower middle income  Middle income  Upper middle income  Highest income | 88.9 (65.4, 120.8)  133.5 (98.9, 180.1)  117.7 (100.3, 138.2)  108.4 (98.1, 119.6)  100.5 (86.4, 116.9) | NS  NS  NS  NS |
| p,p’-DDE | Lowest income  Lower middle income  Middle income  Upper middle income  Highest income | 137.5 (73.7, 256.3)  288.0 (170.8, 485.7)  226.7 (163.0, 315.3)  161.0 (136.8, 189.5)  124.6 (103.7, 149.6) | NS  NS  NS  NS |

\* Plasma concentrations adjusted for serum lipids.

\*\* Adjusted for multiple comparisons. For PCBs, no pairwise comparison was significant. For p,p’-DDE, the following were statistically different: category 5 vs. 2 (p=0.033) and category 5 vs. 3 (p=0.008).

CI = confidence interval; DDE = dichlorodiphenyldichloroethylene; GM = geometric mean; NS = not significant; PCB = polychlorinated biphenyl

**Table S3: Work in Last Week**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Worked at Job or Business in Last Week** | **Lipid-Adjusted**  **GM (95% CI) (µg/kg lipid)\*** | **p-value** |
| ∑PCBs | Yes  No | 96.6 (86.5, 107.9)  118.4 (104.9, 133.7) | <0.05 |
| p,p’-DDE | Yes  No | 128.5 (107.1, 154.2)  200.7 (160.1, 251.6) | <0.0001 |

\* Plasma concentrations adjusted for serum lipids.

CI = confidence interval; DDE = dichlorodiphenyldichloroethylene; GM = geometric mean; NS = not significant; PCB = polychlorinated biphenyl

**Table S4: Body Mass Index Category**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **BMI Category\*** | **Lipid-Adjusted**  **GM (95% CI) (µg/kg lipid)\*\*** | **p-value\*\*\*** |
| ∑PCBs | Underweight  Normal weight  Overweight  Obese  Very obese  Severely obese | 96.7 (65.3, 143.1)  102.5 (93.9, 111.9)  110.6 (98.1, 124.6)  114.4 (95.2, 137.4)  106.9 (73.7, 154.9)  83.4 (60.8, 114.5) | NS  NS  NS  NS  NS |
| p,p’-DDE | Underweight  Normal weight  Overweight  Obese  Very obese  Severely obese | 216.1 (60.0, 778.6)  134.9 (107.5, 169.2)  164.2 (137.7, 195.8)  167.0 (121.1, 230.2)  180.8 (96.2, 339.6)  121.2 (81.5, 180.3) | NS  NS  NS  NS  NS |

\* Based on World Health Organization international standard:

Underweight: BMI < 18.50 kg/m2

Normal weight: 18.50 ≤ BMI ≤ 24.99 kg/m2

Overweight: 25.00 ≤ BMI ≤ 29.99 kg/m2

Obese: 30.00 ≤ BMI ≤ 34.99 kg/m2

Very obese: 35.00 ≤ BMI ≤ 39.99 kg/m2

Severely obese: BMI ≥ 40.00 kg/m2

\*\* Plasma concentrations adjusted for serum lipids.

\*\*\* Adjusted for multiple comparisons. No pairwise comparisons were significant.

BMI = body mass index; CI = confidence interval; DDE = dichlorodiphenyldichloroethylene; GM = geometric mean; NS = not significant; PCB = polychlorinated biphenyl

**Table S5: Body Mass Index Quartile**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **BMI Quartile (km/m2)** | **Lipid-Adjusted**  **GM (95% CI) (µg/kg lipid)\*** | **p-value\*\*** |
| ∑PCBs | Q1 (16.34-23.62)  Q2 (23.65-26.60)  Q3 (26.61-30.02)  Q4 (30.03-63.88) | 98.6 (88.4, 109.9)  111.6 (96.4, 129.2)  110.8 (93.5, 131.2)  107.0 (91.4, 125.3) | NS  NS  NS |
| p,p’-DDE | Q1 (16.34-23.62)  Q2 (23.65-26.60)  Q3 (26.61-30.02)  Q4 (30.03-63.88) | 132.1 (109.1, 159.8)  146.9 (117.1, 184.3)  178.0 (139.6, 227.1)  161.2 (120.9, 215.1) | NS  NS  NS |

\* Plasma concentrations adjusted for serum lipids.

\*\* Adjusted for multiple comparisons. No pairwise comparisons were significant.

BMI = body mass index; CI = confidence interval; DDE = dichlorodiphenyldichloroethylene; GM = geometric mean; NS = not significant; PCB = polychlorinated biphenyl

**Table S6: Dairy Product Consumption**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Dairy Product Consumption\*** | **Lipid-Adjusted**  **GM (95% CI) (µg/kg lipid)\*\*** | **p-value\*\*\*** |
| ∑PCBs | Low (0.00-7.10)  Medium (7.12-13.50)  High (13.80-63.50) | 117.0 (99.7, 137.3)  106.3 (94.0, 120.2)  96.5 (87.0, 107.2) | NS  NS |
| p,p’-DDE | Low (0.00-7.10)  Medium (7.12-13.50)  High (13.80-63.50) | 167.5 (135.1, 207.5)  148.2 (124.6, 176.3)  142.5 (116.0, 174.9) | NS  NS |

\* Numbers in parentheses represent weekly intake frequency.

\*\* Plasma concentrations adjusted for serum lipids.

\*\*\* Adjusted for multiple comparisons. For PCBs and p,p’-DDE, no pairwise comparison was significant.

CI = confidence interval; DDE = dichlorodiphenyldichloroethylene; GM = geometric mean; NS = not significant; PCB = polychlorinated biphenyl

**Table S7: Red Meat Consumption**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Red Meat Consumption\*** | **Lipid-Adjusted**  **GM (95% CI) (µg/kg lipid)\*\*** | **p-value\*\*\*** |
| ∑PCBs | Low (0.00-2.00)  Medium (3.00)  High (3.75-35.00) | 111.7 (100.9, 123.7)  111.9 (97.6, 128.2)  95.2 (82.0, 110.6) | NS  NS |
| p,p’-DDE | Low (0.00-2.00)  Medium (3.00)  High (3.75-35.00) | 171.7 (138.0, 213.8)  140.5 (113.8, 173.5)  138.0 (109.8, 173.4) | NS  NS |

\* Numbers in parentheses represent weekly intake frequency.

\*\* Plasma concentrations adjusted for serum lipids.

\*\*\* Adjusted for multiple comparisons. For PCBs category 3 vs 2 (p=0.035) was statistically different. For p,p’-DDE no pairwise comparisons were significant.

CI = confidence interval; DDE = dichlorodiphenyldichloroethylene; GM = geometric mean; NS = not significant; PCB = polychlorinated biphenyl

**Table S8: Other Statistically Significant Pairwise Comparisons (p <0.05)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Age Category\*** | **Region of Birth†** | **Region of Residence‡** | **Education – Household§** | **Income Quartile – Household\*\*** | **Fish Consumption††** |
| ∑PCBs | C1 vs. C2  C1 vs. C3  C2 vs. C3 | C1 vs. C2  C1 vs. C3  C2 vs. C3  C2 vs. C4  C2 vs. C5  C3 vs. C5 | C1 vs. C3 | C1 vs. C3  C1 vs. C4 | C1 vs. C3  C2 vs. C3 | C1 vs. C2  C1 vs. C3  C2 vs. C3 |
| p,p’-DDE | C1 vs. C2  C1 vs. C3  C2 vs. C3 | C1 vs. C2  C1 vs. C3  C1 vs. C4  C1 vs. C5  C2 vs. C3  C2 vs. C4  C3 vs. C5 | None | C1 vs. C3  C1 vs. C4  C2 vs. C3 | C1 vs. C3  C1 vs. C4 | None |

**\* Age Category**

C1: 20-39

C2: 40-59

C3: 60-79

**† Region of Birth**

C1: North America

C2: Europe

C3: South Asia

C4: East/Southeast Asia

C5: Other

**‡ Region of Residence**

C1: Ontario

C2: Quebec

C3: Rest of Canada

**§ Education – Household**

C1: <Secondary school graduation

C2: Secondary school graduation

C3: Some post-secondary

C4: Post-secondary graduation

**\*\* Income Quartile – Household**

C1: 0-$35 000

C2: $36 000-$60 000

C3: $61 000-$99 000

C4: $100 000-$500 000

**†† Total Fish Consumption (weekly intake frequency)**

C1: Low (0.00-1.00)

C2: Medium (1.02-2.02)

C3: High (2.04-15.50)

C = category; DDE = dichlorodiphenyldichloroethylene; PCB = polychlorinated biphenyl