Canada Beef releases a bi-monthly Nutrition Journal Tracker as a summary report of health/nutrition research published that is of significance for beef.

TOPIC	Canadian Consumption Data
ARTICLE	Consumption of ultra-processed foods in Canada
CITATION	Consumption of ultra-processed foods in Canada, Statistics Canada, Jane Y. Polsky, Jean-Claude Moubarac, and Didier Garriguet, Health Reports, Vol. 31, no. 11, November 2020
LINK	https://www150.statcan.gc.ca/n1/pub/82-003-x/2020011/article/00001-eng.htm
SIGNIFICANCE	The daily energy intake of ultra-processed foods (UPF) in Canada remained high at 46% in 2015 vs 48% in 2004 with the energy contribution of UPF the highest among children and adolescents and increased among adults aged 55 or older.

SUMMARY

Background

- The food supply in Canada and many other countries is dominated by ultra-processed food and drink products (UPF). UPF are characterized by low nutritional quality and the presence of additives. A greater share of UPF in the diet is increasingly linked with poor diet quality, weight gain and elevated risk of developing a number of chronic conditions.
- The NOVA classification is a relatively new system to classify foods and drinks according to type of food processing. Under the NOVA system, foods and drinks are classified as unprocessed or minimally processed, processed culinary ingredients, processed, or ultra-processed. For reference, see the Food and Agriculture Organization's (FAO) document on the NOVA classification system.
- Typical examples of UPF include soft drinks and other sugar-sweetened beverages, sweet and savoury packaged snacks, mass-produced industrial breads, reconstituted meat products such as sausage, bacon and hot dogs, and fast-food and frozen dishes. As a group, these products are characterized by convenience (i.e., durable, ready-to-eat), hyper-palatability, attractive packaging and extensive marketing.
- The study reviewed here used 2015 Canadian Community Health Survey (CCHS) data, the most recent available, to characterize the intake of ultra-processed foods among Canadians and to examine changes since 2004. Of note, the CCHS data is the Statistics Canada resource used as reference for the development of Canada's food guide.

Method

- The 2004 and 2015 CCHS surveys provided 24-hour dietary recall data for Canadians aged 2-years or older. All food and drink items were classified according to type of food processing using the NOVA classification. The mean energy contribution of UPF (as a percentage of total daily energy intake) was compared across survey years for the overall population and for eight age-sex groups.

Results

- On average, ultra-processed foods and beverages contributed almost half of total daily energy intake among Canadians both in 2004 (48%) and in 2015 (46%) with consumption highest among children and adolescents contributing over 50% in both survey years.
- The energy contributions of soft drinks, fruit juices and fruit drinks declined since 2004, particularly among children and adolescents.
- Mass-produced packaged breads (the top UPF energy contributor in both years) contributed more energy in 2015 for nearly all age-sex groups and, to a lesser extent, salty snacks including chips and crackers increased among some age-sex groups.
- Slightly fewer Canadians reported consuming ultra-processed dishes (i.e., hot dogs, burgers, donuts and French fries) in 2015 than in 2004.
- Among adults aged 55 or older, UPF contributed a greater share of total daily energy in 2015 (45%) compared with 2004 (42%). These older adults also consumed less unprocessed or minimally processed foods (females 44% in 2004 vs 40% in 2015, males 42% in 2004 vs 39% in 2015) signaling a shift from whole foods to ultra-processed foods.
- For Canadians on average, the total daily energy intake from unprocessed or minimally processed foods - in which fresh red meats falls – remained at 39% (see Table 2 below). The total daily energy intake from fresh red meats is 5% as determined by customized analysis of the 2015 data (Table 1e).

Table 1e. Percent of total calories from total fresh meat[†], by province, household population aged 1 or older, Canada excluding territories, 2015

Canada	Both Sexes 95% Confidence			Males 95% Confidence			Females 95% Confidence		
	%	from	to	%	from	to	%	from	to
	4.90	4.66	5.13	5.52	5.13	5.91	4.29	4.02	4.56

Table 2. Mean energy contribution (percentage of total daily energy) according to NOVA group, by age and sex, household population aged 2 or orlder, Canada excluding territories, 204 and 2015‡

Age-sex group (age in years)	2004 n=33,924			2015 n=20,080		
	%	95% confidence interval from	to	%	95% confidence interval from	to
NOVA 1: Unprocessed or minimally processed foods						
All ages	38.9	38.5	39.4	39.4	38.8	40.0
Young children, 2 to 5	38.3	37.2	39.3	41.0 *	39.3	42.6
Children, 6 to 12	33.4	32.6	34.1	35.1 *	34.1	36.2
Adolescent females, 13 to 18	32.3	31.2	33.3	36.2 ***	34.3	38.0
Adolescent males, 13 to 18	32.3	31.3	33.3	34.5 *	32.9	36.2
Adult females, 19 to 54	40.7	39.4	41.1	41.7	40.5	42.9
Adult males, 19 to 54	39.0	37.9	40.1	39.7	38.2	41.1
Older females, 55 or older	44.0	42.8	45.1	39.6 ***	38.4	40.7
Older males, 55 or older	42.3	41.2	43.3	39.2 **	37.9	40.5
NOVA 2: Processed culinary ingredients						
All ages	7.2	7.0	7.4	7.1	6.9	7.3
Young children, 2 to 5	4.9	4.5	5.3	4.2 *	3.7	4.6
Children, 6 to 12	5.3	5.1	5.6	5.5	5.0	5.9
Adolescent females, 13 to 18	5.5	5.0	5.9	6.1	5.5	6.7
Adolescent males, 13 to 18	5.0	4.6	5.3	5.0	4.5	5.5
Adult females, 19 to 54	7.9	7.5	8.4	7.8	7.3	8.4
Adult males, 19 to 54	7.2	6.8	7.5	6.9	6.4	7.3
Older females, 55 or older	8.3	7.9	8.7	7.9	7.4	8.5
Older males, 55 or older	9.0	8.3	9.7	8.3	7.8	8.8
NOVA 3: Processed foods						
All ages	6.1	5.9	6.3	7.8 ***	7.5	8.1
Young children, 2 to 5	5.8	5.2	6.5	6.9 *	6.1	7.6
Children, 6 to 12	5.5	5.2	5.9	6.4 *	5.9	6.8
Adolescent females, 13 to 18	5.1	4.6	5.5	7.3 ***	6.4	8.3
Adolescent males, 13 to 18	5.4	4.9	5.9	7.3 **	6.4	8.1
Adult females, 19 to 54	7.1	6.6	7.6	8.9 **	8.1	9.7
Adult males, 19 to 54	5.6	5.2	6.1	8.1 ***	7.3	8.8
Older females, 55 or older	6.0	5.5	6.5	7.3 *	6.5	8.0
Older males, 55 or older	6.2	5.7	6.7	7.3 *	6.4	8.1
NOVA 4: Ultra-processed foods						
All ages	47.8	47.3	48.3	45.7 ***	45.0	46.4
Young children, 2 to 5	51.0	49.8	52.3	48.0 *	46.1	49.9
Children, 6 to 12	55.8	55.0	56.6	53.0 ***	51.9	54.2
Adolescent females, 13 to 18	57.2	56.1	58.3	50.4 ***	48.5	52.4
Adolescent males, 13 to 18	57.4	56.2	58.5	53.2 ***	51.5	54.9
Adult females, 19 to 54	44.8	43.8	45.8	41.6 **	40.2	43.0
Adult males, 19 to 54	48.2	47.0	49.4	45.4 *	43.8	47.0
Older females, 55 or older	41.7	40.6	42.8	45.2 ***	44.0	46.4
Older males, 55 or older	42.5	41.5	43.6	45.3 *	43.9	46.7

† Percentage of total daily energy (kcal) based on the first 24-hour recall.

* significantly different from 2004 (p < 0.05)

** significantly different from 2004 (p < 0.001)

*** significantly different from 2004 (p < 0.0001)

Source: Statistics Canada, Canadian Community Health Survey - Nutrition, 2004 and 2015.

COMMENTS

In 2017, Heart and Stroke commissioned Jean-Claude Moubarac to analyze the same data (CCHS 2015) using same methodology (NOVA classification). His study reported total daily energy intake from UPF as higher - 48% vs. the 46% as found in this study. His response to the inquiry about the discrepancy: '…the difference is due to the methodology, in the Heart and Stroke report we used a different way to capture fast-food intakes, whereas in this study review, we had to use comparable methods between 2004 and 2015 and had to choose another more conservative method that underestimated the real consumption of fast-food from outside the house, overall I would say UPF accounts for 45-50% of total calories, which is quite important.' JC (Dec 2020)