Appendix 1. Supplemental Methods

Health and Lifestyle Surveys:

Several self-reported health and lifestyle questionnaires have been administered by Alberta's Tomorrow Project over time to collect information from participants. Questionnaires were in the English language and questions/content were adapted from multiple previously published surveys and studies. Modifications and new questions were created and validated if needed (1-3). Domains included personal health history (e.g. disease diagnoses), family health history, and health-related behaviours including cancer screening, smoking, alcohol, diet, and physical activity. A full description of the questionnaires, timelines for administration, and topic areas are available on the ATP website (www.myatpresearch.ca).

Lipid analysis:

Lipid analysis of the stored samples (collected from 2008-2015) was conducted in 2017-2020 from 0.5mL of serum as part of a panel of biomarkers conducted on all Alberta's Tomorrow Project participant biosamples by Calgary Lab Services. Serum high-density lipoprotein cholesterol (HDL-C), triglyceride (TG), and total cholesterol (TC) were directly measured using enzymatic and colorimetric methods on a high-throughput Cobas 8000 system. Low-density lipoprotein cholesterol (LDL-C) was calculated according to the Friedewald formula [LDL-C = TC – HDL-C – (TG/2.2)], whereas non-HDL-C and non-fasting remnant cholesterol (RC) were calculated from TC, LDL-C and HDL-C [non-HDL-C = TC – HDL-C; and non-fasting RC = TC – (LDL-C + HDL-C)] (4).

References

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