Cardiovascular disease is the second leading cause of death among Canadians. Given that lifestyle interventions, such as diet and exercise, serve as initial treatments for hypercholesterolemia, identifying dietary constituents that facilitate efficacious reductions in circulating LDL-cholesterol is a high research priority. For example, fibre is a nutrient that is most often associated with beneficial effects on laxation. However, specific dietary fibres from barley, oats and psyllium have been shown to elicit benefits that extend beyond bowel regularity by inducing clinically relevant reductions in circulating LDL-cholesterol levels. In addition, various jurisdictions, including the Government of Canada, have recognized the cholesterol-lowering properties of psyllium, barley and oat fibres and have permitted the use of health claims that permit their hypocholesterolemic effect to be displayed on food labels. Recent research has demonstrated that food-based cholesterol-lowering therapies can act as adjuncts to pharmacological cholesterol-lowering medications and facilitate greater clinical outcomes than when either therapy is utilized independently. The clinical utility of psyllium, barley and oat fibres in reducing cholesterol will be enhanced from current research aimed at identifying the underlying genetic and metabolic basis for hypercholesterolemia and subject specific responses to lipid-lowering therapies.

Objectives of Session
1. Inform Canadian healthcare practitioners of the practical application of oat, barley and psyllium fibres for facilitating clinically relevant reductions in LDL-cholesterol.
2. Discuss fibre-induced cholesterol-lowering mechanisms of action.
3. Provide information regarding methods for identifying foods containing efficacious levels of psyllium, oat and barley fibres as well as government regulations for foods that carry a cholesterol-lowering health claim that is based on fibre content.
4. Discuss the use of psyllium, barley and oat fibres as adjuncts to cholesterol-lowering medications and food-derived bioactives as well as personalized therapy.
References


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