

Heart Health

Point of Care Reference: Improving the Lipid Panel

Applicable to: Health Professionals

This point of care reference provides a summary of key nutrition and lifestyle recommendations to target a patient's [high-density lipoproteins \(HDL\)](#), [low-density lipoproteins \(LDL\)](#), and [triglycerides](#).

For more information, refer to Nutrition Guideline: [Heart Health](#).

High-Density Lipoproteins (HDL)

Table 1. Nutrition and Lifestyle Interventions to Improve HDL

Nutrition Interventions
<ul style="list-style-type: none"> Use monounsaturated fats like nuts, olive oil, and canola oil to replace saturated fats like butter, lard, and shortening.^{1,2}
<ul style="list-style-type: none"> Limit intake of added sugars (e.g., pop, honey, syrups, and sweets).³ Consume a lower carbohydrate diet for people living with obesity, consider less than 45% of energy from carbohydrates or less than 225 g/day on a 2000 calorie diet.⁴
<ul style="list-style-type: none"> Follow guidance from the Mediterranean diet. See Nutrition Education Resources for the patient handout available.⁵⁻⁸
Lifestyle Interventions
<ul style="list-style-type: none"> Recommend 30–60 min aerobic activity daily (e.g. brisk walking, running, swimming, cycling).^{1,9} Encourage resistance training 3 times/week. This includes activities that use weights or use own body weight. <ul style="list-style-type: none"> Consult with physician or physiotherapist prior to beginning.
<ul style="list-style-type: none"> In people living with obesity, consider a 5–10% loss of baseline weight.^{1,10}
<ul style="list-style-type: none"> Moderate alcohol intake (1–2 drinks/day, if triglycerides are not substantially elevated) can increase HDL by 5–10%.¹⁰
<ul style="list-style-type: none"> Recommend smoking cessation.^{1,9}



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Low-Density Lipoproteins (LDL)

Table 2. Nutrition and Lifestyle Interventions to Improve LDL

Nutrition Interventions
<ul style="list-style-type: none">• Limit foods high in saturated fat to less than 9% of energy or less than 20 g/day on a 2000 calorie diet.^{1,11}• Replace foods high in saturated fat (e.g., butter, bacon, coconut oil) with foods high in unsaturated fat (e.g., salmon, walnuts, canola oil).
<ul style="list-style-type: none">• Reduce intake of high fat dairy products (e.g. heavy cream, whole milk, full fat cheese).^{12–15}
<ul style="list-style-type: none">• Limit intake of coconut oil.^{10,13,16–18}
<ul style="list-style-type: none">• Follow the Mediterranean, portfolio, or Nordic diets.
<ul style="list-style-type: none">• Recommend greater or equal to 10 g/day soluble fibre from foods (e.g. bran cereal with psyllium, legumes, ground flaxseed).^{10,19}
<ul style="list-style-type: none">• Recommend 30 g/day (1 oz) or more tree nuts like walnuts, almonds, or pistachios.¹
<ul style="list-style-type: none">• Recommend 30 g/day soy proteins including tofu, soy beverage, miso, natto, tempeh, and edamame.^{1,20}
<ul style="list-style-type: none">• Recommend 2 g/day plant sterols from fortified foods and/or supplements.²¹
<ul style="list-style-type: none">• Consume >5 servings/day of brightly coloured vegetables and fruits.^{10,22}
Lifestyle Interventions
<ul style="list-style-type: none">• In people with obesity or central adiposity, consider 5–10% loss of baseline weight.¹
<ul style="list-style-type: none">• Aim for 30–60 min/day or 200–300 min/week of aerobic activity (e.g. brisk walking, running, swimming or cycling).^{1,9}<ul style="list-style-type: none">○ Consult with physician or physiotherapist prior to beginning.

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Triglycerides

Table 3. Nutrition and Lifestyle Interventions to Improve High Triglycerides (1.7–5.5 mmol/L)

Nutrition Interventions
<ul style="list-style-type: none">Follow guidance from the Mediterranean diet.^{5,6,8}
<ul style="list-style-type: none">Limit foods high in saturated fat (e.g., butter, bacon, coconut oil) and replace them with foods high in unsaturated fat (e.g., salmon, walnuts, canola oil).Consume 30 g/day (¼ cup) nuts as a high source of monounsaturated fat.^{1,23,24}
<ul style="list-style-type: none">Reduce refined grains and starches (e.g., white bread, regular pasta, low fibre cereals).Choose foods high in fibre (e.g., whole grains, legumes, vegetables, and fruit) and soluble fibre (e.g., bran cereal with psyllium, dried figs, and ground flax seed).
<ul style="list-style-type: none">Reduce intake of carbohydrates to <60% energy or <300 g/day on a 2000 calorie diet.^{4,10}Spread foods high in carbohydrates throughout the day to help with glycemic management and insulin resistance.
<ul style="list-style-type: none">Reduce foods with added sugar like pop, honey, syrup, and sweets.Aim for <5% calories from added sugar, and do not exceed 10%.^{3,4,11,25–27}
Lifestyle Interventions
<ul style="list-style-type: none">Manage comorbid conditions (e.g., diabetes, central adiposity, obesity, alcohol misuse disorder).
<ul style="list-style-type: none">In people living with obesity, consider 5–10% loss of baseline weight.^{1,10}
<ul style="list-style-type: none">Reduce or avoid alcohol.^{28–31}
<ul style="list-style-type: none">Recommend 30–60 min aerobic activity daily (e.g., brisk walking, running, swimming, cycling).^{1,9}<ul style="list-style-type: none">Consult with physician or physiotherapist prior to beginning.Limit days without activity and/or reduce extended periods of sedentary time.Aim to have physical activity before higher fat meals.

Table 4. Nutrition and Lifestyle Interventions to Improve Very High Triglycerides (5.6 mmol/L or more)

Nutrition Interventions
<ul style="list-style-type: none">Apply nutrition recommendation in Table 3.
<ul style="list-style-type: none">Limit dietary fat to 5–10% calories (about 10–20 g/day), including healthy fats (e.g., vegetable oils, nuts, seeds).^{32,33}
<ul style="list-style-type: none">High doses (2–4 g/day) of omega 3 fatty acids eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) can have positive effects on hypertriglyceridemia.^{34,35}<ul style="list-style-type: none">Review supplementation with physician and medical team.
Lifestyle Interventions
<ul style="list-style-type: none">Apply lifestyle recommendations in Table 3.
<ul style="list-style-type: none">Recommend complete avoidance of alcohol.^{1,9,10,23,32,36}

Nutrition handouts are available for patients on a variety of topics to help support their learning needs, and nutrition goals. Visit [Nutrition Education Handouts](#) for more information.

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