

A CLINICAL GUIDE

The Heart Health Nutrition Handbook

PL. XXII

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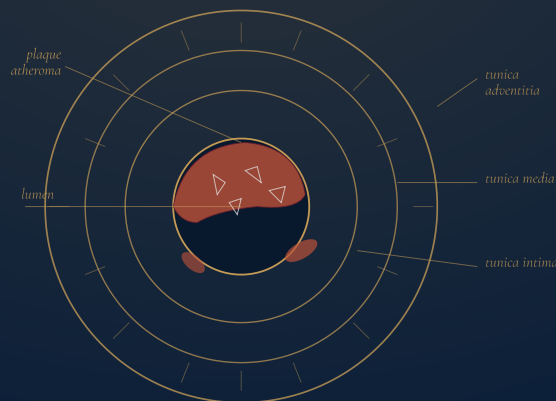


Fig. xxii · Arteria — sectio transversa

ATHEROSCLEROSIS · LIPID-CORE · ENDOTHELIUM

What's *in this guide.*

Thirteen chapters spanning cholesterol and blood pressure. Each addresses one clinical question dietitians repeatedly face in cardiovascular care.

01	Reading the lipid panel · <i>what every number means</i>	pg. 7
02	Risk stratification + treatment thresholds	pg. 16
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CHAPTER 04

Specific food + nutrient *interventions*

Gram-targets, food sources, expected effect magnitudes. Everything the consult room needs.

This chapter operationalises the dietary patterns from Chapter 3 into specific gram-targets and food choices. Each intervention is given with its dose, expected effect on the relevant lipid marker, and concrete food examples. The numbers are as specific as the underlying RCT evidence allows.

4.1 Soluble fibre

Soluble fibre lowers LDL-C by binding bile acids in the gut, forcing the liver to use circulating cholesterol to synthesise more bile, which depletes the intracellular cholesterol pool and upregulates LDL receptor activity. Effect magnitude: -0.14 mmol/L (-5 mg/dL) per 5 g/d increment, derived from a 181-RCT meta-analysis ($n = 14,505$)³.

Target and food sources

Total soluble fibre target: 7 to 10 g/d on top of usual diet. The strongest LDL-active sources:

SOURCE	SOLUBLE FIBRE PER SERVING	NOTES
Oat β -glucan	3 g per 40 g rolled oats (1 cup cooked)	Plateau ~ 3 g/d — more does not add benefit ⁴
Psyllium husk	3 g per 7 g psyllium powder (1 rounded tsp)	7 to 10 g/d gives 7% LDL drop ⁵ ; mix with water before meals
Beans / lentils / chickpeas	1 to 2 g per 1/2 cup cooked	Easy to scale; cheap
Apples / pears / citrus	1 g per medium fruit	Pectin-based
Barley	1 g per 1/2 cup cooked	Pearl barley richer than pot barley
Brussels sprouts, broccoli	2 g per cup	Cooked

4.2 Plant sterols

Plant sterols compete with cholesterol for absorption in the intestinal lumen, blocking around 30 to 40 percent of dietary cholesterol uptake at therapeutic doses. Effect: -9 to -12 percent LDL-C at 2 g/d, plateauing at 3 g/d for a maximum of around 12 percent⁶.

PATIENT HANDOUT PACK

The *Heart Health* Handout Pack

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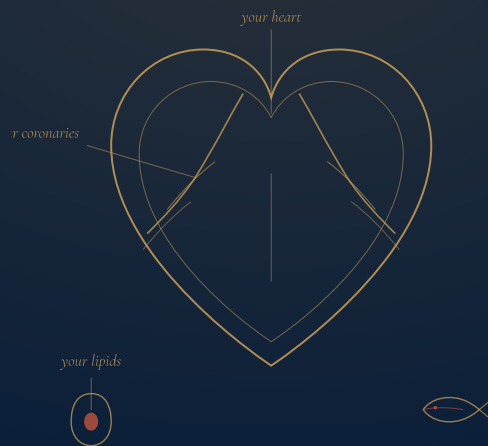


Fig. xxii-p · Caring for your heart

NOURISH · MOVE · PROTECT

FOR THE PATIENT

Reading the label.

Five things to check. In this order. Per 100g, not per serving.

LOOK AT	AIM FOR
Saturated fat	Less than 1.5g per 100g · Ideally under 5% of total energy
Trans fat	0g — banned or restricted in many countries; always check the label, especially on imported products
Fibre	3g+ per 100g · 6g+ per 100g is "high"
Added sugar	Less than 5g per 100g for staples · 10g for treats
Sodium	Less than 120mg per 100g for staples · Under 600mg for ready meals

Ignore "cholesterol-free" claims

Many products labelled "cholesterol-free" are high in refined carbs, sugar, or palm oil. The claim is a marketing artefact. Read the actual numbers.

Per 100g, always

Some labels show "per serving" with a tiny serving size (15g) to make the numbers look small. Always check the per-100g column for an honest comparison.

COMMON TRAP

Some "low-fat" products replace fat with sugar. Always check both the saturated fat AND the added sugar columns. If the saturated fat is low but the sugar is high, the product is not heart-healthy.

FOR THE PATIENT

Cutting down on *salt*

Where the salt really hides, and easy swaps that add up.

Eating less salt is one of the simplest ways to lower blood pressure. Aim for **less than about 5 to 6 g of salt a day** — roughly one level teaspoon, including what is already in your food.

MOST SALT IS ALREADY HIDDEN IN FOOD

Only a small part of the salt we eat comes from the salt cellar. Most is already in everyday foods — bread, processed and cured meats (ham, bacon, sausages, polony), cheese, stock cubes and gravies, sauces, ready meals, and savoury snacks. That is where the biggest savings are.

Easy swaps

CHOOSE MORE

Fresh or frozen vegetables

"No added salt" tinned tomatoes and beans (rinse tinned beans)

Fresh meat, fish, eggs

Herbs, spices, garlic, lemon, vinegar, chilli

Home-cooked meals where you control the salt

CUT BACK ON

Stock cubes, gravy granules, soy and table sauces

Processed and cured meats

Crisps and salted snacks

Ready meals and takeaways

Adding salt at the table

Reading the label

Look at the salt (or sodium) per 100 g:

- **Low** — 0.3 g sodium (0.75 g salt) or less per 100 g. Choose these.
- **High** — 0.6 g sodium (1.5 g salt) or more per 100 g. Have less often.

YOUR TASTE WILL CATCH UP