

# **High Cholesterol**

## What is High Cholesterol (Hypercholesterolaemia)?

Hypercholesterolaemia is the presence of abnormally high levels in the blood of cholesterol and triglycerides (a type of fat in the blood used for energy) that can lead to obstruction of blood flow in the arteries. This inhibits blood flow to the brain, kidneys, genitals, heart and other areas of the body. Cholesterol is considered high if it is greater than 5mmol/l.

## **Signs and Symptoms**

High cholesterol has no symptoms. A blood test is the only way to detect whether you have it or not.

## **Complications**

Angina pectoris, transient Ishcaemic attacks (mini-strokes), deteriorating kidney function, low exercise tolerance, atherosclerosis and heart attack.

### **What Causes High Cholesterol?**

Poor lifestyle behaviours such as physical inactivity and unhealthy diet are responsible for increasing LDL ("bad") cholesterol and decreasing HDL ("good") cholesterol levels in the blood. However, other factors such as genetic/ temperament may prevent the removal of LDL cholesterol from the blood, so causing the liver to produce too much cholesterol.

Risk factors include:

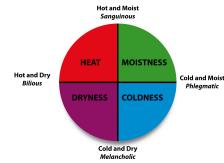
- **Diet** An excessively cold diet, hydrogenated fats like margarine, processed and refined foods.
- Poor liver function.
- Low production of **bile** (in the **gall bladder**) which is produced by the liver to aid digestion of fats.
- Lack of Exercise Regular physical exercise increases HDL levels, so assisting the removal of LDL.

## The Tibb View on High Cholesterol

According to Tibb, high cholesterol results due to **excessive coldness.** This lack of heat impairs blood circulation and allows saturated fats to gather in the blood vessels.

This results in fatty plaques being deposited inside the vessel walls. The arterial bore or lumen narrows, and this reduces blood circulation even further. The reduced blood circulation increases the risk of heart attacks and strokes.

Individuals with a melancholic dominant/sub-dominant temperament are innately more susceptible to developing high cholesterol due to their inherent **cold and dry** nature. However, due to a faulty diet and improper lifestyle, other temperaments can also develop high cholesterol. People with sanguinous



temperaments, who indulge in over-eating and lead a sedentary lifestyle, may also develop high cholesterol. Phlegmatic individuals are also at risk, as they have innate qualities of **coldness** and sluggish metabolism linked to their temperament.

### **Management of High Cholesterol**

Treatment and management is aimed at **reducing the excess coldness with dryness** associated with high cholesterol, by implementing Tibb Lifestyle Factors that will **increase the quality of heat.** This assists Physis in addressing both the symptoms, and the causes of high cholesterol.

#### Tibb Lifestyle Factors

#### **Food and Drink**

- Eat **mostly** Hot & Moist foods such as olive oil, ginger, turmeric and spinach followed by Hot & Dry foods like oily fish, chicken, celery and garlic.
- Eat less of Cold & Moist foods such as cucumber, broccoli, milk, and sprouts and the least amount of Cold & Dry foods – like citrus fruit, yogurt and beef.
- Add fresh garlic to meals where appropriate. Garlic is commonly used in the management of conditions of the heart and circulatory system and is indicated for hypertension and high cholesterol. Other heating herbs and spices like chilli, turmeric and ginger should be added to meals. These help in lowering blood cholesterol and promoting better blood circulation.
- Avoid eating and drinking refrigerated foods and drinks. Allow the food to reach room temperature before consumption.
- Reduce the intake of red meat like beef. Chicken and oily fish like tuna and salmon are preferred.
- Include the following cholesterol lowering foods in your diet: almonds, bananas, garlic, oats, olive oil, salmon, and walnuts.
- Water soluble dietary fibre is important for reducing serum cholesterol. It is present in barley, brown rice, fruits, and oats.
- Use vegetable oils which are liquids at room temperature such as olive and flaxseed oil. Boiled/steamed/grilled chicken and fish should be preferred.
- Eat only raw unsalted nuts, especially pecan, almonds and walnuts. Almonds are rich in the amino acid arginine which has cholesterol-lowering properties.
- Reduce the amount of saturated fats and cholesterol-containing foods in your diet. Saturated fats include coconut and palm oil. Eliminate hydrogenated fats and hardened fats such as margarine and butter.
- Avoid pork or pork-containing products, fried and fatty foods.
- Do not consume alcohol, cakes, candy, carbonated drinks, coffee, gravies, pies, processed or refined foods, refined carbohydrates, tea, tobacco or white bread.
- Drink at least 2 litres of warm water a day.

#### Other Lifestyle Advice

- Regular physical exercise such as brisk walking should be carried out several times weekly.
- Quit smoking as this contributes to the hardening of the arteries.

#### **Herbal Remedies**

- Turmeric Add ¼ to ½ tsp to rice or couscous.
- Mix ¼ teaspoon red chillies, ½ teaspoon ginger root, 3 black pepper and 4 garlic cloves as chutney. Take this with meals 3 times a day.
- Take 1tbsp *psyllium* husk/whole seeds mixed in 1 cup of water.
- Make an infusion using 2tsp fennel seed with 20 mint leaves in 1 cup of boiling water.

## **Cold & Dry Foods**

Meats	Vegetables	Fruits	Nuts	Grains & Seeds	Dairy Products	Oils	Spices & Herbs	Drinks	Flavourants	Condiments & Spreads	Confectionary & Desserts	Cereals	Dishes
beef	brussel sprouts	(all sour fruits)	peanuts	barley	sour cream	coconut oil	basil	coffee		balsamic		cornflakes	sour dishes
biltong (beef)	cabbage	green apples		beans(all types)	egg white	corn oil	tamarind	ice		vinegar		maltabella	
crabs	cauliflower	cherries, coconut		corn	sour milk	sesame oil		sour fruit juices		peanut butter		mielie meal	
fish	eggplant	china/dry fruit		couscous	yoghurt			tea (black)		pickles		millet	
knuckles	green beans	granadilla		lentils						tomato sauce			
mussels	mushrooms	grape fruit		maize						worcestershire			
ostrich	peas	lemon, lime		mielies						sauce			
oysters	potatoes	naartjies, oranges		popcorn						vinegar			
pork	sauerkraut	pineapple,plums		poppy seeds									
snails	tomatoes	prunes, pomegranate		samp									
snoek		raspberries		sesame seeds									
tripe		strawberries											
tuna		sultanas											

## **Cold & Moist Foods**

Meats	Vegetables	Fruits	Nuts	Grains & Seeds	Dairy Products	Oils	Spices & Herbs	Drinks	Flavourants	Condiments & Spreads	Confectionary & Desserts	Cereals	Dishes
duck	beetroot	apricot	macadamia	cucumber seeds	coconut milk		cardamom	milk shakes	fructose		custard	pronutro	
rabbit	baby marrow	cranberries		linseed	cow's milk		coriander	rooibos	glucose		ice cream	rice crispies	
	butternut	figs		melon seeds	goats milk		cumin	sugar cane	rose syrup		sago		
	broccoli, carrots	kiwi fruit		pumpkin seeds	buttermilk		vanilla	juice		1			
	cucumber	litchis, melons		rice cakes	butter			water					
	squash	mulberries		rice	margarine								
	lady fingers (okra)	pawpaw, pears		semolina	rice milk								
	lettuce	prickly pears			soya milk								
	pumpkin	quince											
	radish, sprouts	spanspek											
	soya beans	sweet apples											
	tofu												
	zucchini												

## **Hot & Dry Foods**

Meats	Vegetables	Fruits	Nuts	Grains & Seeds	Dairy Products	Oils	Spices & Herbs	Drinks	Flavourants	Condiments & Spreads	Confectionary & Desserts	Cereals	Dishes
all small bird	bitter gourd	avocado	cashews	celery seeds	eggs	mustard oil	aniseed	alcohol	pungent and	chilli sauce			spicy dishes
meat	celery	grapes	hazel nuts	chickpeas			cinnamon	grape juice	bitter	mustard sauce			
chicken	green pepper		pecan nuts	fenugreek seeds			cloves, garlic	herbal teas	flavourants	peri-peri			
lobsters	leek		walnuts	gram flour			green/red chilli	(see herbs)		sauce			
mackerel	onion			mustard seeds			fenugreek						
oily fish	red pepper			papad			lavender						
pilchards	yellow pepper						nutmeg						
prawns							oregano						
sardines							paprika						
							parsley						
							rocket, rosemary						
							saffron						
							tarragon						

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Meats	Vegetables	Fruits	Nuts	Grains & Seeds	Dairy Products	Oils	Spices & Herbs	Drinks	Flavourants	Condiments & Spreads	Confectionary & Desserts	Cereals	Dishes
buck	artichokes	bananas	almonds	bread	clarified butter	castor oil	bay leaves	green tea	honey	mayonnaise	biscuits	all bran flakes	sweet dishes
goat	asparagus	dates	brazil nuts	bulgar wheat	condensed milk	olive oil	black pepper	hot water	molasses		cakes	bran	
goose	olives	guavas	pistachios	flour	cheese	sunflower oil	cayenne pepper	juices	salt		chocolate	honey smaks	
lamb	spinach	mangoes	apricot kernels	pasta	cream cheese		chives	(see fruits)	sugar		liquorice	muesli	
liver	spring onion	peaches		rye bread	mother's milk		ginger, fennel	herbal teas			vermicelli	nutri-k	
mutton	sweet potato	papaya		sunflower seeds	(for babies)		green masala	(see herbs)				nutrific	
turkey	turnips			wheat	fresh cream		marjoram					oats	
				macaroni			mint, sage					puffed wheat	
				dill seeds			soya sauce					taystee wheat	
							thyme,turmeric					weetbix	
							watercress						
							white pepper						