

# Side-effect management

Managing HIV and HAART-related side-effects can help to:

- ◆ enhance your nutrition status and promote immune function
- ◆ improve medication compliance
- ◆ decrease the number of pills you need to take
- ◆ improve your quality of life.

Food group	Weight loss	Nausea or poor appetite	Taste changes
<b>BREAD</b>	Spread margarine <b>thickly</b> on bread and toast. Add energy-rich toppings (eg <i>peanut butter, avocado, lean meats and eggs</i> ).	Select white or wholemeal <b>bread</b> ~ fresh or toasted. Sandwiches & savoury crackers can also help.	Choose <b>all</b> types of bread and bread products; sweet or savoury toppings may be added depending on taste preferences (eg <i>honey</i> ).
<b>CEREALS, PASTA &amp; RICE</b>	Add <b>margarine or oil</b> to rice and pasta, or spread onto sweet or savoury biscuits. Add <b>sugar</b> to cereals. Use <b>milk</b> or milk-based sauces on pasta and rice.	Choose " <b>bland</b> " products (eg <i>noodles, pasta, rice, Rice Bubbles, Cornflakes or Weet-Bix</i> ) <b>Salty</b> crackers & biscuits may assist with nausea.	Choose <b>all</b> cereal, pasta and rice products. Adding gravy and <b>saucers</b> to pasta and rice may make them more palatable. Honey and <b>sugar</b> may be added to cereals.
<b>FRUIT</b>	<b>Add</b> sugar, ice-cream, or custards and yoghurts.	Tinned or fresh fruit is usually well-tolerated.	Choose <b>all</b> fruit ~ tinned, fresh or dried. Try adding ice-cream, yoghurt or honey if needed.
<b>VEGETABLES</b>	Melt <b>margarine</b> over, or brush with oil. Stir-fry in <b>oil</b> , and use oil-based salad dressings or satay sauce.	<b>Limit</b> those vegetables with strong odours (eg <i>cabbage, brussels sprouts &amp; onions</i> ). Most others can be tolerated.	Choose <b>all</b> vegetables. Try serving with a sauce or with gravy.
<b>DAIRY</b>	<b>Emphasise</b> full-cream milk, cheese, yoghurts, and desserts like mousses, custards and ice-cream.	Dairy products <b>may</b> be tolerated ~ some more so than others (eg <i>cheese may be better than yoghurt</i> ).	Choose <b>all</b> dairy products (milk, cheese, yoghurts and desserts).
<b>MEAT or alternatives</b>	Pan-fry in liberal amounts of <b>oil</b> ; use oil to baste. <b>Add</b> lean meats to sandwiches and salads. <b>Snack</b> on boiled eggs & nuts (eg <i>almonds, peanuts</i> ).	Choose <b>lean</b> cuts (eg ham, chicken, beef, fish). <b>Cold</b> deli meats & tinned fish with salads or on sandwiches are a good meal or snack.	<b>Marinade</b> (eg wine, soy sauce), or add <b>herbs</b> and spices to cooking to make meat more palatable. Other protein (eg <i>soy products, cheese, eggs</i> ) may be consumed instead.
<b>FATS</b>	Be <b>liberal</b> with the use of the " <b>good</b> " fats (check the "Heart Smart foods" good choices guide on page 19).	<b>Limit</b> high-fat foods & meals as these may worsen nausea (eg <i>fried chips, chocolate</i> ).	Be <b>liberal</b> ~ fats in food tend to carry the flavour. Try <b>adding</b> oils, nuts or peanut butter to cooking (use <b>plenty</b> of spreads & oils on bread, pasta, rice).
<b>BEVERAGES</b>	<b>Make every mouthful count – ensure that drinks are tasty and nutritious: choose milk, juice or cordial in preference to tea, coffee or water.</b> Add extra milk powder to milk (2 tbsps / 200ml) for drinks and in cooking.	Supplements may be needed if you are losing weight or your diet is inadequate – speak to your dietitian.	Drink <b>at least 8</b> glasses of water a day. If you experience an unusual taste in mouth, try bitter-flavoured drinks (eg lemon, lime & bitters, lemon juice, tonic water, tea, coffee).

# Useful nutrition solutions

The tips in these tables are useful nutrition solutions to help manage common side-effects.

Food group	Bloating or gas	Constipation	Diarrhoea
<b>BREAD</b>	Choose <b>all</b> kinds of breads and bread products.	Choose <b>grainy</b> bread over white or wholemeal.	Choose white bread <b>only</b> . <b>Limit</b> grains & wholemeal.
<b>CEREALS, PASTA &amp; RICE</b>	Choose <b>all</b> cereal, pasta and rice products.	Choose <b>high-fibre</b> cereals (eg muesli, Sultana Bran, Vita-Brits, Weet-Bix) with <b>at least</b> 6-8g fibre per 100g of product.	Choose <b>low-fibre</b> cereals (eg Rice Bubbles, Cornflakes, Special K) or rolled oats or porridge. White pasta, rice or noodles. Plain crackers and biscuits.
<b>FRUIT</b>	Choose <b>all</b> fruit ~ tinned, fresh or dried.	Choose <b>all</b> fresh and dried fruit (eg prunes, apricots) or tinned fruit.	Select tinned fruit, or bananas and stewed apples (but <b>avoid</b> skins & seeds).
<b>VEGETABLES</b>	<b>Limit only</b> cabbage, brussels sprouts, onions, asparagus, legumes, lentils, cauliflower, broccoli & spinach. Be <b>liberal</b> with <b>all other</b> vegetables.	Use <b>unpeeled</b> , plus legumes (eg baked beans, chickpeas, red kidney beans), dried peas & beans. Nuts and seeds.	Use <b>peeled</b> (eg potato, carrot, pumpkin). Cooked mushrooms and tomatoes.
<b>DAIRY</b>	Try <b>low-lactose</b> milks (eg soy, Liddell's or Zymil) or substitute soy products for all milk. <b>Limit</b> other foods with lactose (eg white cheeses, custard & ice-cream).	Choose <b>all</b> dairy products (milk, cheese, yoghurts and Desserts).	If due to HAART, lactose modification is <b>not</b> needed.
<b>MEAT or alternatives</b>	Choose <b>lean</b> cuts (eg chicken, ham, beef, fish).	Choose <b>lean</b> cuts (eg chicken, ham, beef, fish).	Choose <b>lean</b> cuts (eg chicken, ham, beef, fish).
<b>FATS</b>	<b>All</b> can be included, but <b>prefer</b> the "good" ones ~ check the "Heart Smart foods" good choice page.	<b>All</b> can be included, but <b>prefer</b> the "good" ones ~ check the "Heart Smart foods" good choices on page 19.	<b>Limit high-fat</b> foods & meals, as these may worsen the diarrhoea (eg pizzas, nuts, seeds).
<b>BEVERAGES</b>	Drink <b>at least 8</b> glasses of water a day. <b>Limit</b> aerated beverages (eg softdrinks, mineral and soda waters).	Drink <b>plenty</b> of fluids ~ at <b>least 8-10</b> cups a day. Include pear or prune juice as well as water, for their natural laxative effects. <b>Limit</b> caffeine (coffee & tea) and alcohol ~ dehydration increases constipation.	Drink <b>at least 8</b> glasses of water a day, this will not make diarrhoea worse. <b>Limit</b> caffeine (coffee, tea & cola) and <b>avoid</b> alcohol ~ these dehydrate. <b>Dilute</b> cordial, softdrinks and full-strength juices, otherwise these may worsen diarrhoea.

## Blood Lipids (fats)

Elevated blood lipids (fats), also known as cholesterol and triglycerides, can be a side-effect of certain medications and lifestyle choices.

High blood lipids can lead to a build up of fatty deposits inside the walls of your blood vessels (arteries), making the blood vessel very narrow – this process is called atherosclerosis.

Arteries can become blocked if a blood clot gets stuck in a narrowed artery, stopping the blood and oxygen supply to an area of the body.

If the blocked vessel supplies your heart, it results in a heart attack; if it supplies your brain, it results in a stroke.

## Types of fat

Cholesterol is essential for various processes in the body; it is also a building block for hormones, vitamins, cell walls and is needed for digestion.

The body is able to make all the cholesterol it needs, therefore cholesterol is not required in the diet. Triglycerides are a type of fat found in the bloodstream that originating from food.

**There are three main types of dietary fats:**

- 1 Saturated fats:** dairy products, butter, meat products, coconut milk/cream, palm oil, most commercially baked products and many take-away foods.
- 2 Monounsaturated fats:** olive oil, canola oil, seeds, avocado, nuts (peanut, cashew, almonds).
- 3 Polyunsaturated fats:** seed oils (sunflower, safflower), soybean oil, fish, seeds, nuts (walnuts, hazelnuts, brazil nuts).

High intakes of saturated (bad) fats and cholesterol increase blood cholesterol levels. However, monounsaturated and polyunsaturated (good) fats can lower blood cholesterol levels, if they replace saturated fats in the diet.

Triglyceride levels can be lowered by reducing intake of saturated fats, sugar and alcohol.

The 'Heart Smart' food guide (opposite page) indicates good choices to assist in lowering blood lipid levels.

It is important to note that all types of fat have the same amount of energy and that high fat diets can lead to weight gain.



# “Heart-smart” foods – good choices guide

Food group	GOOD CHOICES	LIMIT
<b>BREAD &amp; CEREALS</b>	Bread (all types), breakfast cereals, flours, rice, spaghetti, crispbreads, rice crackers, wheat crackers, home-made cakes and biscuits (using small amounts of poly- or mono-unsaturated fats and low-fat milk)	Croissants, commercial cakes & pastry, sweet or chocolate biscuits, toasted muesli
<b>FRUITS &amp; VEGETABLES</b>	All fruit and vegetables, including avocados	
<b>DAIRY PRODUCTS AND ALTERNATIVES</b>	Low-fat and reduced-fat milk, soy milk, low-fat yoghurt, low-fat & soy cheese, soy custard & yoghurt, soy ice-cream	Full-cream milk, cream & sour cream, cream cheese and hard cheese, ice-cream, coconut milk & coconut cream
<b>EGGS</b>	Yolk-free egg mix, egg white Maximum of 6 egg yolks a week	More than 6 eggs a week for those with cardiovascular disease
<b>MEAT, POULTRY &amp; MEAT PRODUCTS</b>	Lean red meat, pork, veal, chicken and turkey without skin	Fatty meat, sausages, bacon, liver, pate, kidney, brains, duck, Devon salami
<b>FISH &amp; SHELLFISH</b>	All types of fish and seafood (tinned or fresh)	Squid & prawns more than twice a week
<b>NUTS</b>	Walnuts, pine nuts, almonds, pecans, brazil nuts, macadamias, cashews, hazelnuts, pistachios, peanuts (unsalted)	Coconut (in any form)
<b>FATS &amp; OILS</b>	Poly-unsaturated or mono-unsaturated margarine, oils (olive, canola, safflower seed, sunflower, etc), mayonnaise or salad dressings (use in moderation)	Butter, ordinary margarine, lard, copha, suet, ghee, coconut oil & palm oil
<b>SAUCES, SPREADS</b>	Tomato paste, herbs, spices, pepper, honey, jam	Salt, soy sauce, Vegemite, tomato sauce (in moderation)
<b>TAKEAWAY FOODS</b>	Sandwiches, BBQ chicken (no skin), steakburgers (no mayonnaise/cheese), low-fat yoghurt, fresh fruit or fruit salad, baked potatoes, kebab with tahini	Fried chicken, hot chips, fried fish, pizza, potato scallops, meat pies, sausage rolls, spring rolls, dim sims, hamburgers, etc
<b>SNACKS &amp; LOLLIES</b>	<i>Boiled sweets*</i> , <i>jellied sweets*</i> , <i>liquorice*</i> , unbuttered popcorn, pretzels	Chocolate, fudge, caramels, corn chips and potato crisps
<b>BEVERAGES</b>	Water, mineral water, tea, coffee, fruit juices, low-joule cordial, <i>soft drinks*</i> , <i>fruit drinks*</i> , <i>alcohol*</i> (in moderation)	Milkshakes, coffee whiteners

*\*Limit these if triglycerides are high, along with the other foods in the LIMIT column*



## Impaired glucose tolerance and diabetes

Impaired glucose tolerance (IGT) and diabetes occurs when the body is unable to regulate glucose, which is released from foods containing carbohydrates.

IGT and/or diabetes can result from the use of certain medications (including HAART), having excessive abdominal fat stores, lack of physical activity and genetic factors.

Uncontrolled blood glucose levels can lead to serious health problems such as: kidney failure, heart disease, loss of eye sight and poor blood circulation.

In most cases, dietary changes and increased physical activity can control blood glucose levels and prevent progression of IGT to diabetes.

## The Glycaemic Index

When a carbohydrate containing food is consumed and digested, it releases sugar (mainly glucose) which is absorbed into the bloodstream.

The body responds by releasing insulin (a hormone) which causes the uptake of glucose into body cells and is stored (mainly in muscle and liver tissue) for future use.

The Glycaemic Index (G.I.) is a measure of how fast glucose released from food is absorbed into the bloodstream. The Glycaemic index ranks foods (from 1 to 100) based on their effect on blood sugar levels:

- ◆ Glucose from Low GI foods is absorbed more slowly and evenly into the bloodstream.
- ◆ Glucose from high GI foods is absorbed more rapidly and results in large fluctuations in blood sugar levels.
- ◆ Consuming low GI foods can improve the body's sensitivity to insulin, control established diabetes and provide a sustained source of energy.

The table opposite provides a quick-reference guide to the G.I. of many different food types and their variations, as well as for some popular brand-name products, to help you identify those most appropriate to your nutritional needs.

Note that G.I. values are also clearly highlighted for each of the recipes in the later pages of this cookbook!

*Table reference: Brand-Miller J, Foster-Powell K and Colagiuri S (2002). The New Glucose Revolution: The glycemic index solution for optimum health. 3rd edition, Hodder Headline Australia.*



# GLYCAEMIC INDEX (G.I.) TABLE

	LOW G.I. (< 55)	MID (Intermediate) G.I. (55–70)	HIGH G.I. (> 70)
<b>BREADS</b>	Burgen Soy-Lin = 31 Tip Top 9-Grain = 43 Burgen Fruit Loaf = 44 50% Oat bran bread = 47 Burgen Mixed Grain = 49 Turkish (wholewheat) = 49 Ploughman's Wholegrain = 47 Sourdough wheat bread = 54 Buttercup Fruit Loaf = 54 Spelt multigrain bread = 54	Jatz = 55 Vogel's Honey & Oats = 55 Pita bread (white) = 57 Rye bread = 58 Pastry = 59 Hamburger bun = 61 Croissant = 67 Light rye = 68 Helga's Classic seed loaf = 68 Crumpet = 69 Ryvita Crackers = 69 Sao = 70 White bread = 70 Helga's wholemeal = 70	Bagel = 72 Lebanese (white) bread = 75 Doughnut = 76 English Muffin = 77 Wholemeal bread = 77 Gluten-free multi-grain bread = 79 Gluten-free white bread = 80 Wonderwhite = 80 Molenberg = 80 Turkish bread (white) = 87
<b>CEREALS</b>	All-Bran = 30 Guardian = 37 Gluten-free muesli = 39 Porridge = 42 Toasted muesli = 43	Oat Bran = 55 Mini Wheats = 58 Just Right = 60 Nutrigrain = 66 Vita-Brits = 68 Weet-Bix = 69 Froot Loops = 69	Mini Wheats (blackcurrant) = 72 Bran flakes = 74 Coco Pops = 75 Corn Flakes = 77
<b>RICE &amp; PASTA</b>	Vermicelli = 35 Spaghetti (wholemeal) = 37 Spaghetti (white) = 38 Rice noodles = 40 2 minute noodles = 46	Semolina = 55 Basmati rice = 58 Couscous = 65 Taco shells = 68 Aborio rice = 69 Tapioca = 70	Corn pasta (gluten-free) = 78 Calrose rice = 83 Rice pasta = 92 Jasmine rice = 109
<b>SNACKS &amp; DRINKS</b>	Peanuts = 14 Cashew nuts = 22 Nutella = 33 Ensure Plus = 40 Milk chocolate = 42 Strawberry Jam = 51 Coca Cola = 53	Milo = 55 Oat meal biscuits = 55 Honey = 55 Potato crisps = 57 Muesli bar (with fruit) = 61 Mars bar = 62 Orange cordial = 66 Fanta = 68 Milk Arrowroot biscuit = 69	Popcorn = 72 Water crackers = 78 Gatorade = 78 Puffed rice cakes = 82 Burger Rings = 90 Glucose = 100
<b>LEGUMES</b>	Butter beans = 31 Chickpeas = 42 Lentils = 44 Baked beans = 48		Broad beans = 79
<b>VEGETABLES</b>	Sweet potato = 44 Sweet corn = 46 Peas = 48 Carrot = 49	Beetroot = 64 Gnocchi = 68	Pumpkin = 75 French Fries = 75 New potato = 78 Instant potato = 85 Sebago potato = 87 Pontiac potato = 88 Desiree potato = 101
<b>FRUIT</b>	Apple (fresh) = 38 Pear (fresh) = 38 Apple juice (250ml) = 40 Peach (fresh) = 42 Orange (fresh) = 42 Green grapes (fresh) = 46 Mango (fresh) = 51 Banana (fresh) = 52	Sultanas = 56 Apricot (fresh) = 57 Rockmelon (fresh) = 65 Pineapple (fresh) = 66 Kiwi fruit (fresh) = 68	Watermelon (fresh) = 72
<b>DAIRY PRODUCTS</b>	Cheese = 0 Yoghurt (fruit, low fat, artificial sweetner) = 14 Milk (full fat) = 31 Milk (Skim) = 32 Yoghurt (fruit, low fat, with sugar) = 33 Soy milk (full fat) = 36 Custard = 43 Soy milk (reduced fat) = 44 Ice cream (low fat) = 50	Ice cream (regular fat) = 61 Condensed milk = 61	