

Perth Diet Clinic



UNDERSTANDING DIABETES MEDICATIONS FOR TYPE 2 DIABETES

People with Type II Diabetes are insensitive to insulin or do not produce enough insulin. After dietary change and exercise have been implemented, if blood sugars are still elevated, medication is sometimes recommended. There are a number of types of medications that can be prescribed for people with type II Diabetes. Your doctor will select the best one or combination for you. They should be combined with healthy eating and an active life style.

There are 5 classes of tablets:

1. Biguanides

Chemical Name	Brand Name	Duration of Action
Metformin	Diabex, Diaformin, Glucophage, Gluomet, Novomet.	2 hours

Metformin is usually prescribed for people who are overweight. It works in three ways by delaying absorption of glucose from the intestine, reducing the amount of glucose entering the blood stream from the liver, and finally by increasing insulin sensitivity with increase glucose uptake by the cells. It may have a mild appetite suppressant effect. Tablets should be taken with or directly after a meal. Side effects may be nausea, diarrhoea and indigestion, but if the dose is slowly increased, symptoms usually settle after a period of time. Hypoglycaemia or low blood sugars are rarely a problem. It should not be used if there is severe, liver, kidney or heart disease present.

2. Sulphonylureas

Chemical Name	Brand Name	Duration of Action
Glibenclamide	Daonil, Glimel.	18-24 hours
Gliclazide	Diamicon, DiamiconMR, Glyade.	18-24 hours
Glipizide	Minidiab, Melizide.	6-12 hours
Glimepiride	Amaryl.	18-24 hours
Tolbutamide	Rastinon	8-12 hours

They help the pancreas to secrete additional insulin. Tablets should be taken before a meal containing

carbohydrate. Side effects can be low blood sugars or Hypoglycaemia, mild nausea, diarrhoea and increased appetite leading to weight gain.

3. Meglitinides

Chemical Name	Brand Name	Duration of Action
Repaglinide	NovoNorm.	5 hours

They work like **Sulphonylureas** and help the pancreas to secrete more insulin. They can result in hypoglycaemia. Meglitinides work for short periods beginning within an hour and lasting up to four hours. It is taken before meals or snacks and helps to reduce the high blood sugar level after a meal. They are available by private prescription only. Side effects can be weight gain and gastrointestinal disturbances.

4. Alpha-Glucosidase Inhibitors

Chemical Name	Brand Name	Duration of Action
Acarbose	Glucobay	2 hours

They slow down the digestion of Carbohydrate thus reducing the rise in blood sugars after meals. They do not cause hypoglycaemia on their own. Tablets should be taken just before eating. They may cause diarrhoea and flatulence in 25% of patients. Side effects are minimised by slowly increasing the dose.

5. Thiazolidinidiones (Glitazones)

Chemical Name	Brand Name	Duration of Action
Rosiglitazone	Avandia.	Some days.
Pioglitazone	Actos.	Some days.

They do not cause Hypoglycaemia on their own and can be used with other medication or insulin. They are not available on PBS, but on private prescription and cost about \$200 per month. They can be taken at any time of the day. It may take one to two months for their full effect to become apparent. They help to reverse insulin resistance and so increase the effect of insulin, to store excess glucose in the liver and improve blood lipids. Side effects can be weight gain and fluid retention and so they are not recommended with severe heart disease or heart failure. Some questions have been raised about liver damage.

**STAR RECIPE**

Low Fat Lemon Panna Cotta With Strawberry Sauce

An ideal end to a meal especially when strawberries are in season.

Panna Cotta

Ingredients

1 tin low fat (1.6%) evaporated milk (375ml)
1 tabspn grated lemon rind
1 teaspoon pure vanilla essence (5ml)
½ cup sugar (110grams)
1 cup Natural Greek yoghurt (250ml)
2 tabspns lemon juice (40ml)
1 tabspn water (20ml)
2 ½ teaspoons gelatin 6.5grams)

Method

Simmer but do not boil milk with lemon rind for 5 minutes.
Remove from heat and sieve and discard lemon rind.
Stir in vanilla essence, sugar and yoghurt.
Mix lemon juice, water and gelatin together in a glass measuring cup.
Let stand for 5 minutes and then heat gently in microwave to melt. Add to milk mixture.
Spray 6- ½ cup ramekins or small teacups with oil.
Divide Panna Cotta between them. This may be made in bowl instead.
Cover with plastic wrap and refrigerate for at least 12 hours or overnight.
If time is short, freeze for 1 hour first.
Ease Panna Cotta around the top of mould and then dip ramekin in hot water for 30 seconds.
Unmould on to plate.
Pour 2 tablespoons of chilled strawberry sauce over each Panna Cotta and serve.

Serves : 6

Nutrients per Serve : KJ 835, Calories 200, Carbohydrates (grams) 31.9, Fat (grams) 5.1, Protein (grams) 7.5, Saturated Fat (grams) 3.3.

Note : This is a relatively low fat version of Panna Cotta that is an ideal finish to a meal. The regular version with cream and crème fraiche would be 2003 KJ (479Calories) and 38 grams of fat per serve. Even this one is a substantial dessert and would be best served after a relatively low carbohydrate meal such as a grill with vegetables or salads. It is a rich source of calcium.



Strawberry Sauce

Ingredients

½ punnet washed, hulled and finely chopped strawberries (100grams)
2 tabspns caster sugar
¼ cup water

Method

Mix strawberries, sugar and water together.
Microwave for 2 minutes.
Chill.
Serve with Panna Cotta.

Variations:

Use fresh raspberries, blueberries or sliced mango sprinkled with a little icing sugar as an alternative.

Visit our web site at

<http://www.perthdietclinic.com.au>

for nutrition information, health and cooking tips and an abundance of recipes.

ALL ABOUT EGGS

Many eggs reach stores only a few days after the hens lay them. Egg cartons display the "Best Before Date". This will be not more than 49 days, from time of delivery for processing (according to Golden Egg Farms™). If you buy them with a "Best Before Date" that is near to expiring, they will need to be consumed within a few days to ensure quality. They should be refrigerated in their carton in the coldest part of the refrigerator, not the door, to prevent significant quality loss.

Eggs are usually stamped using the Julian Date. You may refer to the Julian Date converter in order to determine the exact date that your eggs were processed.

Eggs are usually stamped individually with the first line:

Walaid (laid in WA) and

The second line is the Julian Date, Producer and Packaging Company.

240pb10 means for example

240=Aug28 (Julian Date), pb=code for producer, 10=code for Golden Egg Farms who checked and packaged them.

To determine Julian Dates:

Access a "Julian Date Converter" to calculate the day/month pack date from the Julian Date by clicking this USDA link:

www.ams.usda.gov/poultry/consumer/InterpretPackDate.htm

View how days correspond to Julian Dates by clicking on:

www.usda.gov/procurement/toolkit/calendar.pdf

Producers prefer a brown-shelled egg, as they are tougher. If you want white eggs to colour, then go directly to a producer. They are quite rare. Brown eggs are more difficult to check for blood spots but with new candling machinery, this is much improved. Blood spots can be cause when the chicken is very young or stressed.

You may purchase different types of eggs:

- Caged Eggs* - they are the most common and the cheapest.
- Free Range* - not caged and run around outside.
- All Grain* - vegetarian- fed only on grain.
- Barn-Laid* - (in a barn but not caged).
- Ready Eggs* - frozen egg white with a mixture added for the yolk- cholesterol free and available in Coles New World. Good in cooking for people with high cholesterol.

About the egg:

The shape may be described as oval.

The normal egg weight range is 35gms to 77gms.

The Proportions and solids contents of the components of the average egg are:

% of whole egg

Shell=10.5%

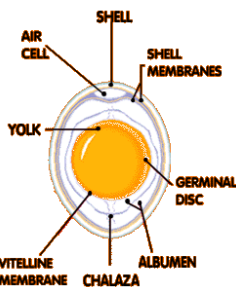
Yolk=31%

White=58.5%

Total Edible=89.5%

The **SHELL**, the first line of defence against the entry of bacteria, can be brown or white. The nutritional value of the egg is the same. It is composed mainly of calcium carbonate. There are two **SHELL MEMBRANES** on the inside of the shell. One membrane sticks to the shell and one surrounds the white (albumen). It is the second line of defence against bacteria and is composed of thin layers of protein fibres.

The **GERMINAL DISC** appears as a slight depression on the surface of the yolk.



It is the entry for the fertilization of the egg. There are two layers of **WHITE ALBUMEN** one thin and one thick. It is mostly made of water, high quality protein and some mineral. It represents 2/3 of the egg's weight (without shell). When a fresh egg is broken, the thick albumen stands up firmly around the yolk. The **CHALAZA** is a pair of spiral bands that anchor the yolk in the centre of the thick albumen. The fresher the egg the more prominent the chalazas. This is unnoticeable when the egg is cooked. **YOLK MEMBRANE (VITELLINE MEMBRANE)** surrounds and holds the yolk. The fresher the egg the stronger the membrane. The egg **YOLK** is a major source of vitamins and minerals, including protein and essential fatty acids. It represents 1/3 of the egg's weight (without shell). The yolk's colour ranges from light yellow to deep orange, depending on the hen's food. The **AIR CELL** forms at the wide end of the egg as it cools after being laid. The fresher the egg the smaller the air cell although this isn't necessary a good measure of freshness as this varies depending on the chicken.

Eggs and nutrition:

Recent research has shown an egg a day will NOT increase the risk of heart disease or stroke for healthy individuals with normal cholesterol. Some individuals with elevated cholesterol may be very sensitive to the cholesterol in egg yolks. There is 215 mg of cholesterol in one 55 gram egg. We recommend keeping the cholesterol in the diet below 200 mg on a daily basis as much as possible. It is wise in these cases to limit eggs to no more than 2 a week.

Frozen egg white with a mixture added for the yolk: e.g. "Ready Eggs" may be used very successfully instead of fresh eggs in quiches, baking, and in omelets or scrambled eggs.

Eggs have excellent nutritional value, being a complete protein and are nutrient dense. A 55 gram egg contains only 338KJ (81 calories) while providing several essential nutrients. It has all the essential amino acids needed in the building and repair of the cells in muscles and other body tissues.

Vitamins A, D and E are fat soluble and only available in the yolk. Vitamin A or retinol gives the yolk its orange colour. Most of the B group vitamins are in both the yolk and the white although the yolk has greater quantities. Two carotenoids, lutein and zeaxanthin, are both abundant in egg yolks, and help protect against macular degeneration, a leading cause of blindness in older Australians. The yolk has 2.5 grams monosaturated fats, 0.7grams of polyunsaturated fat and 1.8 grams of saturated fats.

Eggs are a healthy choice and for those that tend towards a vegetarian diet, they can make a valuable contribution to the complete protein of their diet.

Eggs definitely have a place in a well balanced diet. Try dishes from the website such as:

Spinach Cocktail Bites, Time Saver Cheese and Ham Puff, Baked Frittata, Quiche, Vegetable Cheese Roulade, Cheesy Pumpkin Ricotta bake, Low Fat Salmon Quiche, Cream Carmel, Honey Bread Pudding, Spanish Cream or Strawberry Meringue Roll.

A special thankyou to the Egg Industry Research and Development Council, Golden Egg Farm and *FOOD REFLECTIONS Newsletter*, University of Nebraska Cooperative Extension in Lancaster County (lancaster.unl.edu/food/foodtalk.htm).

HANDY COOKING HINTS

Grating Fresh Ginger

Freeze fresh ginger and it will always be on hand in good condition. Grate it while frozen and you don't even need to peel it first. I use a white ceramic grater that I found in a speciality store.

Cutting Large Mushrooms

Use an egg cutter to get fast even slices.

Chopping Herbs

Use a pizza slicer.

PRACTICE VENUE CHANGES

Amy Williams will no longer be consulting at Palm Springs Medical in Warnbro. Amy will now be at Woodbridge Physiotherapy in Rockingham on Thursday afternoon and at Murray Medical Centre in Mandurah on Friday mornings.

Niki Campbell now has a session every Tuesday morning at the Ocean Reef Family Medical Practice.

Refer to the schedule on the back page for locations and times.

Consulting Venues and Times

WEST PERTH

12 -14 Thelma St West Perth Phone : 9322 4680 Fax : 9321 4775	L. Peacock / N. Campbell	Monday	7.00am - 5.30pm
	P. Stacy / L. McEvoy	Tuesday	7.00am - 5.00pm
	A. Williams	Wednesday	7.00am - 5.30pm
Email: stacy@perthdietclinic.com.au	L. McEvoy	Thursday	9.30am - 5.30pm
Web: http://www.perthdietclinic.com.au/	L. Peacock / N. Campbell	Friday	7.00am - 5.30pm
	L. McEvoy / A. Williams	Saturday	8.30am - 12.30pm

APPLECROSS

Applecross Medical Group 764 Canning Highway Applecross Phone : 9364 6444	P. Stacy L. McEvoy	Wednesday Monday	1.00pm - 6.30pm 8.00am - 12.00noon
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KARDINYA

Kelso Medical Group Suite 8, South St Kardinya Phone : 9331 3366	A. Williams P. Stacy	Tuesday Thursday	1.00pm - 6.00pm 1.30pm - 6.30pm
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Sports Medicine Glengarry Unit 1, 64 Arnisdale Rd Glengarry Phone : 9246 4055	L. McEvoy	Tuesday Wednesday	2.00pm - 6.00pm 9.00am - 12.00noon
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MANDURAH

Murray Medical Centre 34-36 Minijlya Parkway Mandurah Phone : 9535 1166	A. Williams	Friday	8.30am - 1.00pm
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OCEAN REEF

Ocean Reef Family Medical Practice Unit 5, 81 Marina Boulevard Ocean Reef Phone : 9307 5344	N. Campbell	Tuesday	9.30am - 12.30pm
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ROCKINGHAM

Woodbridge Physiotherapy 37 Elanora Drive Rockingham Phone : 9592 4211	A. Williams	Thursday	12.00noon - 5.30pm
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