Accu-Chek® Diabetes Portion Plate

**VEGETABLES**

**PER MEAL:**
Fill the top ½ of the plate (GREEN SECTION) with any of these non-starchy vegetables

**OR**
Eat as many of these vegetables as you can hold in both hands

- Vegetables are high in fibre, vitamins and minerals.
- Non-starchy vegetables are very low in carbohydrates and do not affect your blood glucose levels significantly.
- Include a variety of different coloured vegetables.
- Use healthy preparation methods (and try to add only a little butter, sugar, cream, cheese sauce or oil).

**Dark green vegetables:**
Baby marrow, Broccoli, Cucumber, Gem squash, Green beans, Leafy salad greens (including Romaine lettuce), Lettuce, Collards, Kale, Turnip greens, Green herbs (e.g. Parsley).

**Red and Orange vegetables:**
Beetroot, Carrots, Pumpkin, Red peppers, Tomato, Fresh, frozen and canned vegetables can be used (prepared with herbs and a little salt).

**Other vegetables:**
Cabbage, Cauliflower, Egg plant (brinjal), Mushrooms, Onions.

**STARCH**

**PER MEAL:**
Fill the bottom left ¼ of the plate (PURPLE SECTION) with any of these starchy foods

**OR**
Eat any cooked starch the size of ONE of your closed fists.

**OR**
Measure 1 cup (250ml) of any cooked starch or high fibre cereal.

**OR**
Measure ½ cup (125ml) healthy muesli.

**OR**
Eat 2 slices of wholegrain bread or 4-6 wholegrain crackers such as Provita & Ryvita.

Include a variety of whole-grain starchy foods and limit refined grains:
Brown/Wild rice, Couscous/Quinoa, Legumes/Soya/Hummus, Mealie meal (pap, phutu, porridge), Oats/oat bran, Pearl barley, Pearl/sulphur wheat, Sorghum, Whole grain crackers/bread/cereal, Whole grain/seeded bread or Whole wheat pasta.

The following are starchy vegetables and also belong in this group because of their higher carbohydrate content:
- Butternut, Potatoes, Sweet potatoes, Mealies.

**Avoid:** refined grains or products made with refined wheat flour (e.g. white bread/rolls, muffins, white rice, refined cereals, samp etc.) as these are lower in fibre and will increase blood glucose to a greater degree. Mealie meal porridge can be cooled down and eaten cold to lower the effect on blood glucose levels.

**PROTEIN**

**PER MEAL:**
Fill the bottom ¼ of the plate (RED SECTION) with any of these proteins

**OR**
Eat any protein the size of the palm of your hand and the same thickness as your baby finger

- White fish e.g. hake and haddock.
- Naturally oily fish – include these at least twice a week
  - Salmon, pilchards, sardines, snoek, mackerel and herring.
- Lean poultry - chicken and turkey (remove the skin).
- Red meat - beef, lamb, pork with visible fat removed (eat limited amounts).
- Legumes are also a very good source of protein and fibre. E.g. dried beans, lentils, chickpeas.
- Eggs.
- Tofu.
- Cottage cheese.
- Hard cheese can be included in small amounts. Opt for lower fat options e.g. mozzarella cheese.

**Avoid:** processed meats like ham, polony, viennas, salami etc.

**FAT**

**PER MEAL:**
Include healthy fats (YELLOW SECTION) of plant origin on a daily basis in moderate amounts.

**OR**
Eat any fat the size of the tip of your thumb (top of your thumb to your knuckle).

- Avocado (1/4 of an avocado)
- Nuts (choose unsalted raw nuts) (6-8 nuts)
- Nut butters (without added sugar and salt)
- Olives (5-6)
- Seeds e.g. sunflower seeds, sesame seeds, pumpkin seeds
- Olive oil, avocado oil, canola oil (1 teaspoon)

Fats are energy-dense and consuming high levels of fat can lead to weight gain or being overweight.

Use healthy cooking methods: grill, bake, steam, poach, microwave, pressure cook or boil. You can also use cooking spray or a non-stick pan.

**Avoid:** using too much margarine, butter, mayo or salad dressing.

**OR**
Eat half a small avocado.

**OR**
Add 1 teaspoon of fat per person when making stews or curries.

A dietitian can help you work out your individual fat requirements.
**TREATMENT OF LOW BLOOD GLUCOSE (Hypoglycaemia)**

Hypoglycaemia occurs when blood glucose levels drop too low, which can happen when the body gets too much insulin or not enough food, when meals or snacks are missed or eaten late, when you exercise more than you planned or when you drink alcohol without eating.

Symptoms of Hypoglycaemia include: shaking, trembling, blurry eyes, weakness, dizziness, pale skin, sweating, rapid pulse, hunger, nausea, irritability and feeling confused.

To treat Hypoglycaemia immediately eat or drink something that is high in sugar such as 125ml of regular Coke (not Coke Light) OR a 125ml glass of fruit juice OR 1 Tablespoon jam or honey OR 3 teaspoons sugar in water. This will push your sugar level up quickly (within 10 – 15 minutes).

After 15 minutes you need to eat a healthy carbohydrate combined with a protein source e.g. wholegrain bread with nut butter/cottage cheese or plain yoghurt.

**DRINKS**

- Water remains the healthiest option. Aim to drink 6 – 8 glasses per day.
- Add fruit slices (e.g. strawberries), cucumber slices, lemon juice or mint leaves to your water to vary the taste.
- Avoid any sugary drinks (e.g. sugar-containing fizzy drinks, cordials, iced tea).
- Avoid fruit juice. A large glass of fruit juice can easily be equivalent to three to four pieces of fruit – unnecessary extra kilojoules. Fruit juice is also very low in dietary fibre. If you are drinking frui juice, only use ½ cup (125ml) and dilute it with water (these can have the same effect on your blood sugar as normal sugary cold drinks).
- Substitute a fruit or snack in your meal plan with this.
- Avoid hot drinks that contain sugar e.g. hot chocolate, Horlicks and Milo.
- Use artificially sweetened beverages in moderation.
- You may include tea and coffee in your diet. Avoid adding sugar to your hot drinks.

**THINGS TO AVOID**

- Alcohol
- Sweets and cakes
- Full cream milk and ice cream
- Foods such as chocolates, biscuits etc. that are labelled “Suitable for diabetics” OR “Sugar Free” OR “No sugar Added” are not recommended. Remember, sugar-free does not mean carbohydrate and calorie free. They may contain other types of sugars which can increase your blood glucose level or even cause diarrhea. They are generally also high in fat and calories which can lead to weight gain.

**DIABETIC PRODUCTS**

Foods such as chocolates, biscuits etc. that are labelled “Suitable for diabetics” OR “Sugar Free” OR “No sugar Added” are not recommended. Remember, sugar-free does not mean carbohydrate and calorie free. They may contain other types of sugars which can increase your blood glucose level or even cause diarrhea. They are generally also high in fat and calories which can lead to weight gain.

**SALT**

Eating too much salt in your diet can cause high blood pressure (hypertension) which can cause damage to the kidneys, heart, brain and eyes. High blood pressure has no signs or symptoms so the only way to know if you have it is to have it checked at every visit to your doctor or nurse.

Reducing salt in your diet can help to reduce your blood pressure.
- Do not add salt or salt-containing spices to food during cooking or at the table.
- Use spices that do not contain salt e.g. herbs, pepper, onions, garlic, curry powder, chilli, lemon juice, vinegar, ginger etc.
- Avoid meat tenderizers, stock cubes, soya sauce, convenience and instant meals, as well as ready-made sauces, salad dressings, soups and gravies.
- Avoid ingredients such as salt, sodium, monosodium glutamate (MSG), sodium chloride, sodium bicarbonate, or any sodium containing additive.
- Eat small amounts or avoid processed foods (boerewors, viennas, sausages, polony, cold meats, fish cakes, hamburger patties, bully beef), tinned and smoked foods, spreads (mustard, Boyvi, fish paste, liver or meat spreads, pate, cheese spread), most cheeses and salty snacks (crisps, salty biscuits, biltong, salted nuts, salted popcorn, olives, pickles, anchovies).
- Make sauces, salad dressings, soups and gravies at home and eat unprocessed and fresh meat, fish, chicken, fruit, vegetables and beans regularly.

**FISH**

Fats are very high in vitamins, minerals and fibre just like vegetables. Fish do contain carbohydrates so keep that in mind with your meal plan.

1 portion of fish = size of a tennis ball (e.g small apple, orange or pear), 2 golf balls (e.g. 2 plums), small banana, handful of grapes, ½ cup of cut-up fruit, 30g dried fruit (± 2 pieces), ± 125ml 100% fruit juice (with no added sugar). Try to include a variety of different fruits.

It is recommended you discuss with a dietitian the number of portions per day and where best to include in your meal plan.

Avoid:
- Tinned fruit (in syrup).
- Sugar coated dried fruit.
- Sweetened fruit juice.
- Large portions of 100% fruit juice.

**SUGAR SUBSTITUTES**

Sugar substitutes may be used instead of sugar to sweeten foods and drinks.

Sugar substitutes contain very few kilojoules and will therefore not affect your blood glucose levels.

Remember that many products that use sugar substitutes instead of sugar may still contain other sources of carbohydrates and may increase blood glucose levels.

Examples of non-nutritive sweeteners include aspartame, saccharin, acesulfame K, stevia and sucralose. Sugar alcohols are sugar substitutes that have about half of the kilojoules of sugar. Examples of these include xylitol and sorbitol. Include stevia and sucralose. Sugar alcohols are sugar substitutes that have about half of the kilojoules of sugar. Examples of these include xylitol and sorbitol. Include products that contain sugar substitutes in moderation.

**FRUIT**

Fruits are very high in vitamins, minerals and fibre just like vegetables. Fruit do contain carbohydrates so keep that in mind with your meal plan.

1 portion of fruit = size of a tennis ball (e.g small apple, orange or pear), 2 golf balls (e.g. 2 plums), small banana, handful of grapes, ½ cup of cut-up fruit, 30g dried fruit (± 2 pieces), ± 125ml 100% fruit juice (with no added sugar). Try to include a variety of different fruits.

It is recommended you discuss with a dietitian the number of portions per day and where best to include in your meal plan.

Avoid:
- Tinned fruit (in syrup).
- Sugar coated dried fruit.
- Sweetened fruit juice.
- Large portions of 100% fruit juice.

**SNACKS**

Snacking should be tailored to your current diabetes medication regimen and to the type of diabetes that you have. Discuss this with your dietitian/diabetes educator/doctor what is most suitable for you.

- Keep some of the following ideas in mind when eating out or getting take-aways:
  - Only order one course per meal and ask for ½ portions where possible.
  - Salads that contain croutons, olives, avocado, cheese, nuts, seeds, salad dressing and mayonnaise are high in fat. Order a plain green salad with separate salad dressing and drizzle a little on or use vinegar and a dash of oil or a squeeze of lemon.
  - Order tomato or vegetable based soups instead of cream based soups.
  - Order grilled meat (beef or veal), chicken (without the skin) or fish with no extra oil. Keep away from deep-fried, crumbed (battered) and sweet and sour dishes as well as gravies, cream-based or butter-based sauces – rather squeeze fresh lemon for flavour. Ask for a drizzle of olive oil but try to avoid sour cream and butter.
  - Roast, sautéed or mashed potatoes, fried chips and onion rings are high in fat, so choose boiled rice or plain baked or boiled potatoes instead (add a little butter).
  - Order steamed, grilled or boiled non-starchy vegetables instead of butternut (which often has sugar added) and spinach (which often has cream added).
  - Toasted sandwiches are often very high in fat - rather order an open sandwich on health or rye bread or wrap with no or less butter, sauce, dressing or mayonnaise and with salad instead of chips or potato wedges.
  - Order a small vegetarian pizza with less cheese and extra vegetables or a salad on the side.

Some take aways are healthier than others. It is recommended you discuss with your dietitian/diabetes educator/doctor what is most suitable for you.