

Carbohydrate Exchange

Carbohydrate

Carbohydrates are our body's primary and preferred source of energy. In our diet, we consume carbohydrates mostly in the form of starches and sugars. These are broken down into glucose (a type of sugar) to enter our blood. Therefore, carbohydrates have the greatest impact on our blood sugar as compared to protein and fat. The type and amount of carbohydrates we eat affects how quickly sugar enters our blood.



Carbohydrate Exchanges



You can use Carbohydrate Exchanges as a simple guide to plan your carbohydrate intake across the day. This helps you get a consistent amount of energy without causing large fluctuations in your blood sugar levels. Your dietitian will work with you on the carbohydrate exchanges you need at each meal and for the entire day.

1 carbohydrate exchange = 15 grams of carbohydrate

Total carbohydrate exchanges per day	
	_____ exchanges
Breakfast	_____ exchanges
Lunch	_____ exchanges
Afternoon Tea	_____ exchanges
Dinner	_____ exchanges
Supper	_____ exchanges







Refer to the next few pages to find out what makes up 1 carbohydrate exchange for some common carbohydrate food sources.

To help you estimate the carbohydrate content of foods, familiarise yourself with the following measuring sizes:

			
Teaspoon (5ml)	Dessertspoon (10ml)	Tablespoon (15ml)	Soup spoon (30ml)
			
Cup/ mug (250ml)	Plate (23cm)	Soup bowl (16.5cm, 1L)	Rice bowl (11.5cm, 300ml)

Starch

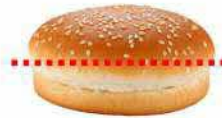
Rice, Pasta & Noodles

		
3 dessertspoons or $\frac{1}{4}$ rice bowl cooked white/ brown rice (50g)	$\frac{1}{2}$ rice bowl porridge (130g)	2 pieces cooked ketupat/ lontong (70g)
		
$\frac{1}{3}$ rice bowl cooked bee hoon/ rice noodles/ kway teow (70g)	$\frac{1}{4}$ rice bowl cooked pasta/ egg noodles (50g)	$\frac{1}{3}$ rice bowl cooked barley (70g)

Breads, Biscuits & Cereal



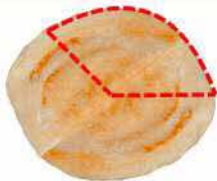
1 slice plain white/
wholemeal bread (30g)



½ burger bun (30g)



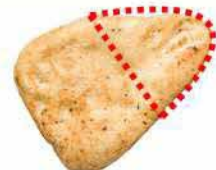
18cm diameter
½ piece chapati (30g)



36cm diameter
⅓ big piece plain thosai
(45g)



9cm diameter
1 piece idli (75g)



20cm diameter
⅓ piece plain naan
(30g)



2 heaped dessertspoons
dry rolled oats (23g)



3 heaped dessertspoons
dry instant oats (22g)



⅔ cup plain cornflakes
(17g)



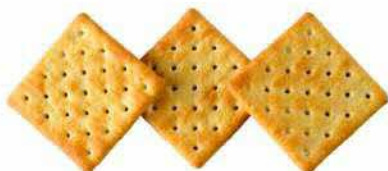
½ cup bran flakes
(20g)



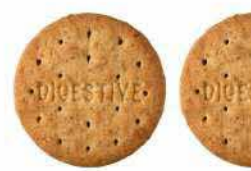
2 pieces cookies (e.g.
peanut butter sandwich
cookies, oreo) (15g)



3 pieces marie biscuits
(21g)



3 pieces cream crackers (15g)



1.5 pieces digestive biscuits (30g)

Fruits & Vegetables

Fruits

 <p>1 small apple (150g)</p>	 <p>3 medium fresh apricots (135g)</p>	 <p>3 whole dried apricots (30g)</p>
 <p>½ medium size banana (e.g. cavendish) (100g, 15-20cm)</p>	 <p>1.5 small bananas (e.g. pisang mas, pisang rastasli, baby bananas) (100g, 9-10cm)</p>	 <p>¾ cup blueberries (120g)</p>
 <p>12 cherries (90g)</p>	 <p>2 tablespoons dried cranberries (20g)</p>	 <p>1 large date (e.g. medjool) (~20-24g)</p>
 <p>2 small dates (e.g. deglet nour, ajwa, mazafati) (~8-10g/ piece)</p>	 <p>½ dragonfruit (140g)</p>	 <p>1 big durian seed (50g)</p>



15 small grapes (75g) or
8 large grapes (75g)



1 slice honeydew
(125g)



3 medium seeds
jackfruit/ nangka (200g)



4 cempedak fruits with
seed (94g)



2 medium green kiwis
(185g)



1.5 medium gold kiwis
(100g)



8 longans (100g)



7 lychees (100g)



½ small mango (100g)



4 small mangosteens
(80g)



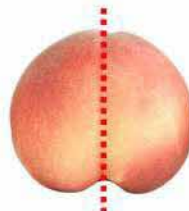
1 medium orange
(140g)



1 slice papaya (150g)



1 small peach
(e.g. donut peach, yellow
stone, mini) (100g)



½ large peach (e.g.
white peach) (100g)



1 small pear (150g)



½ large pear
(e.g. packham, crystal
pear) (150g)



1.5 section pomelos
(150g)



1 slice pineapple
(140g)



2 small plums
(e.g. sugar, cherry plum)
(120g)



1.5 medium plums
(e.g. Japanese/ Chinese
plums) (120g)



3 dried prunes (25g)



2 tablespoons dried
raisins (20g)



6 rambutans (110g)



1 medium starfruit
(300g)



15 medium strawberries (180g)









1 slice watermelon (220g)

Fruit Juice*

 <p>½ cup apple juice (125ml)</p>	 <p>¾ cup orange juice (200ml)</p>	 <p>⅓ cup prune juice (85ml)</p>
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*Unsweetened or "no added sugar" juices. Read product labels for carbohydrate content.

Starchy Vegetables

 <p>½ medium potato (90g)</p>	 <p>½ medium sweet potato (60g)</p>	 <p>½ medium yam (60g)</p>
 <p>½ medium corn on the cob (~100-120g)</p>	 <p>4 dessertspoons corn kernels (fresh/ frozen/ canned) (75g)</p>	 <p>½ cup green peas (105g)</p>

Legumes



$\frac{1}{3}$ cup baked beans (73g)



$\frac{1}{2}$ cup cooked edamame beans (75g)



$\frac{1}{2}$ cup/ 3 dessertspoons cooked lentils (e.g. dhal) or
beans (e.g. green/ red/ black/ mung) (75g)

Nuts – Choose unsweetened varieties



$\frac{1}{2}$ cup almonds/ cashews/ peanuts/ mixed nuts
(50-60g)



$\frac{1}{3}$ cup macadamias
(40g)

Milk & Alternatives

 <p>1 cup unflavoured low-fat milk (250ml)</p>	 <p>6 heaped teaspoons powdered milk</p>	 <p>½ cup evaporated milk (125ml)</p>
 <p>¾ cup regular soymilk (200ml)</p>	 <p>1 cup reduced sugar soymilk (250ml)</p>	 <p>1 small tub plain, unsweetened yogurt (200g)</p>

Sugar

 <p>3 teaspoons plain sugar/ regular fruit jam/ honey/ pancake syrup</p>	 <p>4 teaspoons condensed milk</p>
 <p>4 teaspoons instant malt beverage powder, regular (e.g. Milo, Horlicks, Ovaltine)</p>	 <p>5 teaspoons Milo Gao Siew Dai/ Kosong powder</p>

Contributed by Nutrition & Dietetics Service, Allied Health Services

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Information shared is accurate as of September 2024 and subject to revision without prior notice.



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