



# Natimuk United Football & Netball Club

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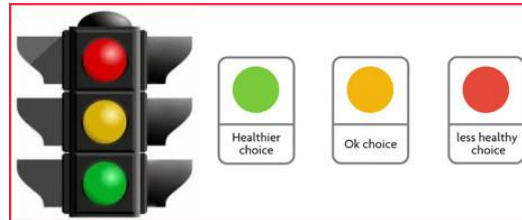
WEST WIMMERA HEALTH SERVICE DIETETICS DEPARTMENT  
GEORGIA GRAY & LILY RAMAGE



# Topics we will cover:

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- **Nutrition for growth, development & sports performance**
  - Protein & energy
  - Carbohydrate
  - Iron
  - Calcium
  - Fluid & hydration
- **Snack ideas**
- **Introducing a change to the NUFC kiosk: the “Traffic Light System”**



# Goals of nutrition in youth & adolescence:

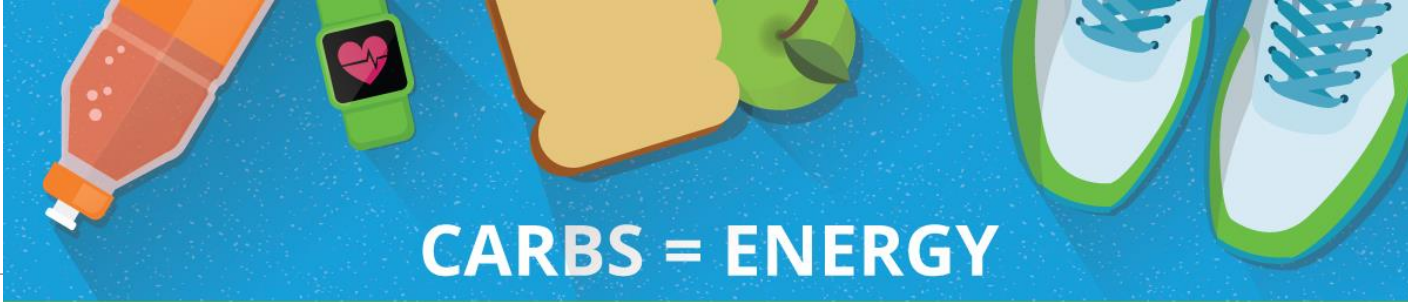
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## Fuelling for:

- Normal bodily functions
- Significant growth & development
- Extra demands of sports training

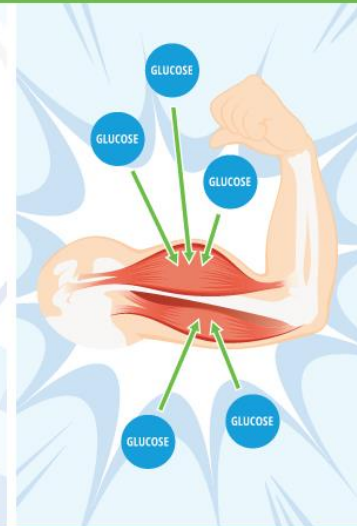
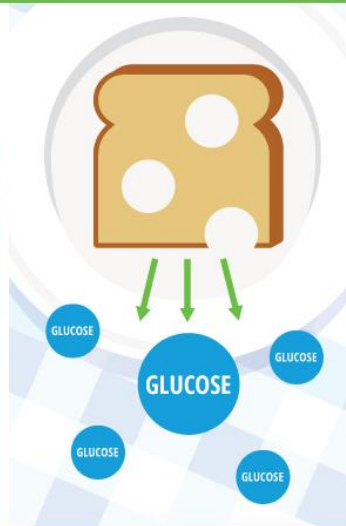
All while building a healthy lifelong relationship with food!





# CARBS = ENERGY

Carbohydrates break down into glucose when we eat them. They enter our muscle cells, giving us the energy to perform our best during workouts.



Load up on healthy carbs one to four hours before your workout.

➤ The carbs are broken down into glucose, a quick form of energy.

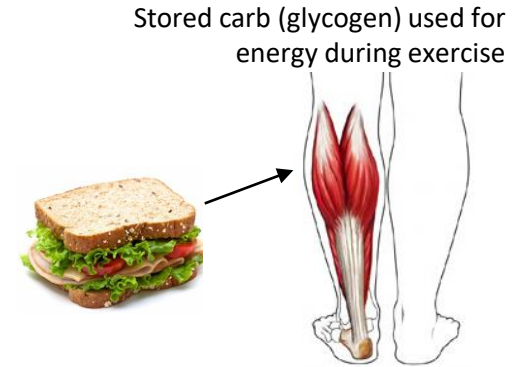
➤ The glucose enters your muscle cells.

➤ This gives you the fuel to exercise at your maximum capacity.

# Carbohydrates

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- The body's preferred fuel source!
- Kids + teenagers have a reduced capacity to store carbs compared to adults
- Our bodies break down stored carbohydrate when we exercise
- Important to replace these carb stores after training & matches
- Go for **quality** carbohydrates, such as:
  - Whole-grain breads, cereals, crackers & pasta
  - Brown rice
  - Legumes
  - Starchy veggies: potato, sweet potato, corn & peas
  - Fruit
  - Milk & yoghurt



## CARBOHYDRATES FOR ENERGY

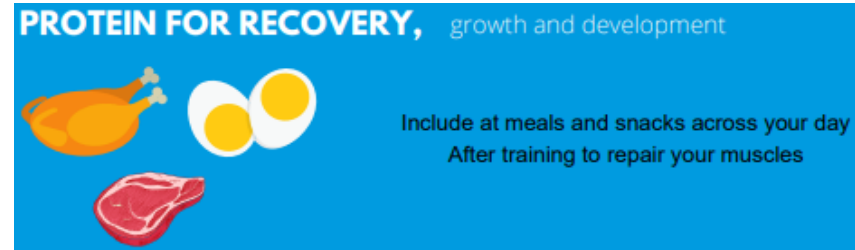


Eat more around training and events  
Provide fuel to perform

# Protein

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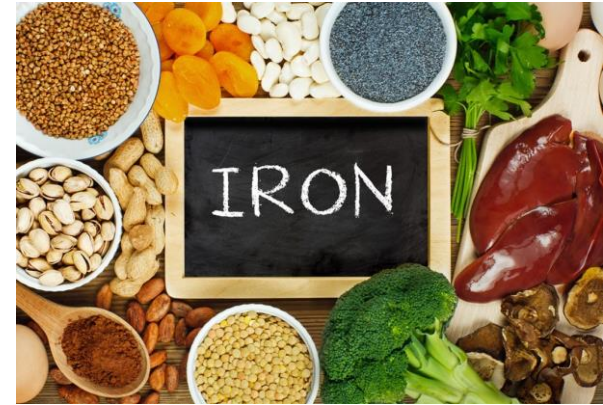
- With **enough energy** intake, protein → builds muscle & promotes growth
- Amount & timing of protein intake = important
- Aim for protein at every meal & snack every 3-4 hrs
- Aim to eat **~20g protein within 30-60 minutes** of training/a match for repair & recovery!
- **Protein-rich foods include:**
  - Red meat, poultry & fish
  - Dairy
  - Beans, lentils & chickpeas
  - Soy products such as tofu & edamame beans
  - Eggs
  - Nuts



# Iron

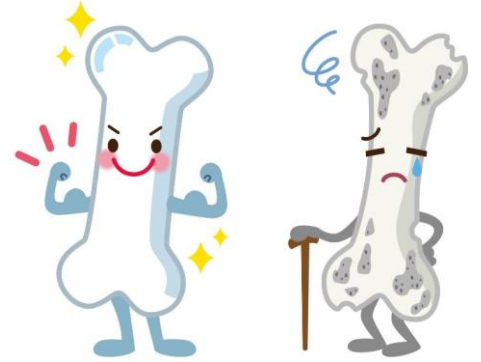
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- Iron helps **transport oxygen** through blood around the body
- We can lose iron through:
  - Sweat
  - Intense running → red blood cells break down
  - Menstruation
  - Injury & illness
- Low iron can cause tiredness & impair sports performance
- Iron-rich foods include:
  - Red meat
  - Legumes
  - Dark leafy greens
  - Fortified breads & cereals



# Calcium (& Vitamin D)

- Needed for proper bone & skeleton growth
- Getting enough calcium is needed to reach peak bone mass  
→ reduced risk of future osteoporosis (weak and brittle bones)
- Calcium-rich foods include:
  - Dairy
  - Boney fish (e.g. tinned salmon & sardines)
  - Dark leafy greens
  - Almonds
  - Sesame seeds
- Vitamin D increases calcium absorption:
  - Sunlight exposure
  - Food sources = eggs & mushrooms

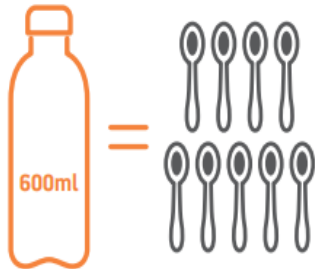
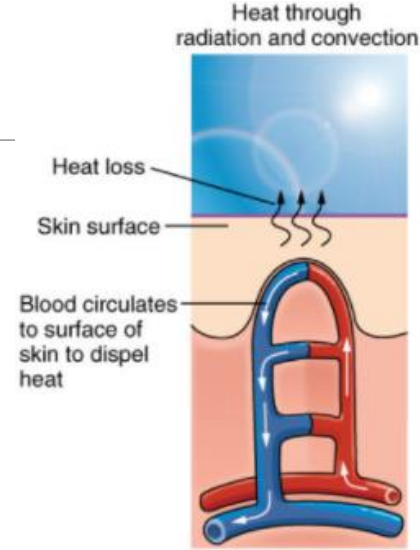




# Fluid for hydration

Children & teenagers regulate body temperature differently to adults:

- Less sweating means reduced salt & fluid loss compared to adults
- Instead, the body cools itself by widening blood vessels close to the skin to radiate heat
- Without the same need to replace electrolytes, **plain water is best!**
- During **lengthy** exercise, milk is a great choice → **carbs + fluid + salt + protein**



A standard 600ml sports drink has around nine teaspoons of sugar. That's one and half times the recommended daily limit for added sugar.



## CHOOSE MOSTLY WATER



Always choose water  
Junior athletes should not require sports drinks  
Full cream milk for healthy teeth & bones

1	2	3	4	5	6
Not hydrated	Hydrated	Well hydrated	Slightly dehydrated	Very dehydrated	Severely dehydrated

You can check if you are hydrated by looking at your urine, aim for number 2 or 3

# Mentimeter

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- <https://www.menti.com/1b5bikb6wb>



Go to [www.menti.com](https://www.menti.com) and use the code **9975 7814**

Mentimeter

# What is the key role of calcium in the body?

0



Provides  
energy

0



Builds  
bones

0



Grows  
muscle



# Snacks: before the game/ training

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Easily digestible, good quality carbohydrate:

- Piece of fruit
- Yoghurt
- Glass of milk
- Fruit muffin or banana bread
- Grain bread with peanut butter and banana
- Vegetable sticks with hummus dip

Or hearty breakfast ideas

- Porridge or wholegrain cereal + fruit
- Baked beans on toast
- Cheese/tomato toastie
- Scrambled eggs on toast



# Food after the game/training

High protein and serve of carbohydrate

## Snack ideas:

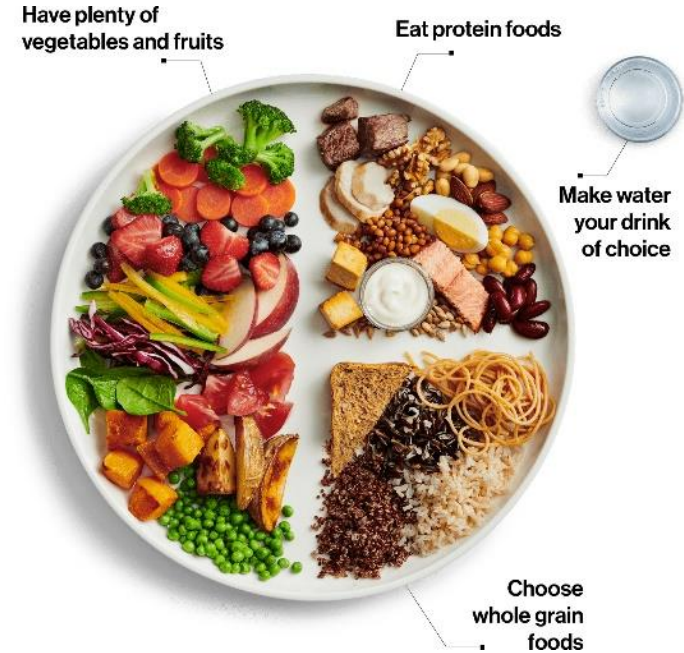
- High protein yoghurt and fruit
- Tinned tuna and beans on grain crackers
- Baked beans on grain bread
- Cheese, tomato and avocado on grain crackers
- Sardines + avocado/ricotta on crackers (good for calcium too)
- Egg and salad sandwich
- Peanut butter + banana on grain bread
- Apple with peanut butter
- Tzatziki dip with falafel
- Ricotta on grain crackers



# Food after the game/training

## Main meal after game/training

- Protein- meat, fish, eggs, legumes, dairy
- Vegetables/fruit- eat the rainbow for nutrients
- Carbohydrate- potato, pasta, rice, noodles, wholegrain bread



# Recipes to take home

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- Choc banana breakfast smoothie
- Veggie omelette fritters
- Banana and oat crumble muffins
- Edamame, avocado and tomato toast
- Carrot cake muffins
- Banana bread

Source: Sports Dietitians Australia recipes



# Mentimeter Round 2

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- <https://www.menti.com/1b5bikb6wb>





Go to [www.menti.com](https://www.menti.com) and use the code **9975 7814**

# Select the most optimal post-exercise fuel!

Mentimeter

0



Banana

0



Egg &  
salad roll

0



Sports  
drink



# Putting it into action: healthy options made easy

An example of marketing resources available for retail food outlets meeting the Healthy Choices guidelines.

## Choose well. Feel great.

Making healthy choices easier.

To help you make healthier choices, food and drinks have been classified according to their nutritional value.

**Best choice**  
Choose **green** food and drinks as often as possible. They are fresh and good for you.

**Choose carefully**  
Choose **amber** food and drinks sometimes. They are less healthy and there are better options.

**Limit**  
To look after your health, choose **red** food and drinks rarely and in small amounts.

## The traffic light classification system

The *Healthy choices: food and drink classification guide* categorises foods and drinks as **GREEN**, **AMBER** or **RED** based on their nutritional value.

### The GREEN category – best choices

These foods and drinks are the healthiest choices. Ensure they are always available and displayed prominently. Actively promote and encourage **GREEN** foods and drinks.

### The AMBER category – choose carefully

These foods and drinks should be selected carefully and consumed in moderation. Do not let **AMBER** items dominate the menu or choices displayed. Do not promote or advertise **AMBER** items at the expense of **GREEN** options. Offer healthier options within the **AMBER** category and avoid large serve sizes.

### The RED category – limit

These foods and drinks should be consumed rarely and in small amounts. Availability and display of **RED** options should be limited and promotion and advertising of **RED** items should be avoided.



# Go For Green!

## The GREEN category – best choices

Foods and drinks in the GREEN category are the healthiest choices. They are usually:

- good sources of important nutrients
- lower in saturated fat, added sugar and/or salt
- lower in energy (kilojoules)
- higher in fibre.

GREEN foods and drinks are based on the five food groups in the *Australian guide to healthy eating*:

- grain (cereal) foods, mostly wholegrain and/or high fibre cereal varieties
- vegetables and legumes/beans
- fruit
- milk, yoghurt, cheese and/or their alternatives, mostly reduced-fat
- lean meat and poultry, fish, eggs, tofu, nuts and seeds and legumes/beans.

Water is also an important part of the GREEN category and should always be readily available.

Some GREEN foods and drinks are even healthier than others. For example, wholegrain and white bread are both in the GREEN category, but wholegrain bread is higher in fibre and is a healthier choice.

Offering GREEN foods and drinks in appropriate serve sizes is consistent with the recommendations in the *Australian dietary guidelines*.

### Guidelines for the GREEN category

Ensure GREEN foods and drinks are always available

- Offer a wide variety of GREEN choices.
- Ensure GREEN ingredients make up the majority of meals, snacks and drinks.
- Include GREEN choices across all menus and product categories.
- Make GREEN choices available for as much of the day as possible, including after hours and on public holidays.

### Actively promote and encourage GREEN foods and drinks

- Promote GREEN choices in all situations where foods and drinks are offered.
- Ensure GREEN choices are attractively presented and competitively priced.
- Include GREEN choices in special offers such as meal deals, combos and loyalty cards.

### Display GREEN foods and drinks in prominent areas

- Place GREEN choices at eye level on shelves, in fridges and in vending machines.
- Display GREEN choices at the front of cabinets and bain maries.
- Place GREEN choices in high traffic areas.



## Foods and drinks in the GREEN category

Below is a summary of foods and drinks in the GREEN category. For more GREEN choices refer to the *Common foods and drinks classification guide* (Section 5).

### Grain (cereal) foods

- Breads, rolls, bagels, English muffins
- Some plain corn/rice cakes and crispbreads
- Plain grains including rice, pasta, noodles, barley, buckwheat, semolina, polenta, burghul, cracked wheat, couscous, quinoa
- Breakfast cereals that meet the GREEN criteria in Table 1 (page 20)
- Pilo pastry

### Fruit

- Fresh and frozen fruit, including avocado
- Fruit purée or canned fruit in natural juice or water with no added sugar
- Stewed fruit with no added sugar

### Vegetables

- Fresh and frozen vegetables
- Canned vegetables

### Legumes/beans

- Beans (such as kidney, soy, mung), lentils, chickpeas, split peas, baked beans

### Milk, yoghurt, cheese and alternatives

- Reduced-fat plain milk
- Cheese that is naturally lower in fat (including cottage and ricotta) and reduced-fat forms of other cheeses (such as reduced-fat cheddar)
- Reduced-fat plain or flavoured yoghurt and custard
- Calcium-fortified dairy alternatives (including soy/rice/almond drink, soy yoghurt)
- Reduced-fat flavoured milk and calcium-fortified alternatives that are equal to or less than 900 kJ per serve as sold

### Lean meat/poultry, fish, eggs and alternatives

- Lean meat (such as beef, pork, lamb, veal, chicken, turkey) with visible fat and skin removed
- Fresh and frozen fish
- Canned fish in spring water
- Eggs
- Tofu and bean curd

### Nuts and seeds

- Plain, unsalted, unroasted/dry roasted nuts and seeds in serve sizes up to 30 g
- 100 per cent nut/seed paste with no added sugar, salt or fat

### Mixed meals

- Some commercial or freshly prepared ready to eat meals, mixed hot-food dishes or plated dinners that are lower in fat, salt and added sugar and use vegetables, legumes and beans, lean meats, wholegrains and reduced-fat cheeses

### Sauces, soups, dips and dressings

- Pasta and simmer sauces, soups, dips, mayonnaise and salad dressings that meet the GREEN criteria in Table 1 (page 20)

### Drinks

- Plain, unflavoured water (tap, spring, mineral, soda, sparkling)
- Reduced-fat plain milk
- Calcium-fortified milk alternatives (including soy/rice/almond drink)
- Reduced-fat flavoured milk and calcium-fortified flavoured milk alternatives that are equal to or less than 900 kJ per serve as sold
- Tea and coffee without added sugar



# Amber in moderation

## The AMBER category – choose carefully

AMBER foods and drinks should be selected carefully and consumed in moderation. Although AMBER items may provide some valuable nutrients they can:

- contribute to excess energy (kilojoule) intake
- contain moderate amounts of saturated fat, added sugar and/or salt.

AMBER options may be healthier varieties of items that are usually in the RED category. For example, sugar-sweetened soft drinks are RED. Diet soft drinks contain less energy and are AMBER.

Healthier choices in the AMBER category include less saturated fat, added sugar and/or salt or more fibre. Adding GREEN ingredients to AMBER foods and drinks is a good way to make AMBER items healthier.

Use the Common foods and drinks classification guide (Section 5) to help you identify healthier AMBER choices.

## Guidelines for the AMBER category

### To encourage people to choose AMBER foods and drinks carefully you can:

- reduce the amount and variety of AMBER foods and drinks offered
- provide AMBER items in smaller serve sizes
- provide healthier choices within the AMBER category.

### Do not let AMBER foods and drinks dominate

AMBER foods and drinks should not dominate the choices available. Offering mostly AMBER items will provide excess kilojoules at the expense of nutrient-rich GREEN options that are needed for optimal health and vitality.

### Do not promote AMBER foods and drinks at the expense of GREEN choices

This includes:

- product placement in cabinets, shelves, fridges, refrigerated cabinets, bain maries and vending machines
- product placement in high-traffic areas such as reception desks, counters in waiting areas, entrances and exits of food outlets, beside cash registers and in dining areas
- promotion or advertising on counters, cabinets, fridges, vending machines, menu boards, staff notice boards, in lifts and via promotional stands and product displays.

### Avoid large serve sizes

Today there is a general trend towards serving or packaging foods and drinks in larger portions, making it easier to consume excess energy (kilojoules). Offer moderate portions instead.



## Foods and drinks in the AMBER category

Below is a summary of foods and drinks in the AMBER category. For more AMBER choices refer to the Common foods and drinks classification guide (Section 5).

### Grain (cereal) foods

- Some savoury breads, scrolls, focaccias and twists
- Some breakfast cereals which do not meet the criteria in Table 1 (page 20)

### Fruit and vegetables

- Canned fruit or stewed fruit with added sugar (for example in syrup or jelly)
- Dried fruit in serve sizes up to 30 g
- Some fruit leathers, straps and dried fruit bars that are 100 per cent dried fruit with no added sugar
- At least 99 per cent fruit juice with no added sugar<sup>7</sup> in serve sizes up to 250 ml
- Ice blocks, ice crushes, gelato and sorbet based on pure fruit juice with no added sugar<sup>7</sup> in serve sizes up to 250 ml
- Vegetables roasted in oil, marinated and pickled vegetables, olives

A serve of fruit juice in the Australian dietary guidelines is 125 ml. For practicality, the maximum serve size for AMBER fruit juices is 250 ml.

### Milk, yoghurt, cheese and alternatives

- Regular-fat plain milk
- Regular-fat forms of cheese
- Regular-fat plain or flavoured yoghurt and custard
- Reduced-fat flavoured milk and flavoured milk alternatives that are between 900–1600 kJ per serve as sold
- Regular-fat flavoured milk and flavoured milk alternatives that are equal to or less than 1600 kJ per serve as sold

### Meat and alternatives

- Meat or poultry with visible skin or fat
- Fish canned in brine, oil or flavoured sauce
- Some meat products and lean, processed meats that meet the AMBER nutrient criteria

<sup>7</sup> Added sugar includes sucrose (commonly called sugar), fructose, glucose, honey, fruit juice concentrates, fruit sugar syrup, deionised fruit juice and similar ingredients.

(Table 2, page 21), for example some uncrumbed/ crumbed burgers patties, bolls or strips and some lean, reduced sodium deli meats (roast beef/turkey breast slices, pastrami, chicken breast pieces)

### Nuts and seeds

- Salted nuts and seeds
- Nut and seed pastes with added sugar, salt or oil

### Unsaturated fats and oils

- Mono- or poly-unsaturated margarines and oils such as canola, olive, peanut, sesame, sunflower, safflower, soybean, flaxseed

### Single hot-food items, ready to eat meals and snack foods

Items that meet the AMBER nutrient criteria (pages 21–22). This includes some:

- savoury-topped breads and pizzas with wholemeal flour and reduced-fat cheese
- steamed dim sims and spring rolls
- oven-baked potato products
- ready to eat meals, mixed hot-food dishes and plated dinners
- savoury snack foods, biscuits and crispbreads
- wholemeal muffins or scones with added fruit and vegetables
- uncoated, un-iced sweet biscuits
- ice-creams, milk or soy-based ice confections and dairy desserts made with reduced-fat milk

### Drinks

- Regular-fat plain milk
- Reduced-fat flavoured milk and flavoured milk alternatives that are between 900–1600 kJ per serve as sold
- Regular-fat flavoured milk and flavoured milk alternatives that are equal to or less than 1600 kJ per serve as sold
- Fruit and vegetable juices with no added sugar<sup>8</sup> in serve sizes up to 250 ml
- Ice crushes (for example Slurpees™ and slushies) based on at least 99 per cent fruit juice with no added sugar<sup>8</sup> in serve sizes of up to 250 ml
- Artificially sweetened drinks with no added sugar<sup>8</sup> it is recommended to provide these drinks in the smallest serve size available (for example, less than 375 ml cans)
- Artificially sweetened energy drinks with no added sugar in serve sizes up to 250 ml
- Some formulated supplementary drinks (milk/ alternative based) that are not high in protein

<sup>8</sup> Added sugar includes sucrose (commonly called sugar), fructose, glucose, honey, fruit juice concentrates, fruit sugar syrup, deionised fruit juice and similar ingredients.

# Limit Red

## The RED category – limit

Foods and drinks in the RED category are based on 'discretionary choices' in the Australian dietary guidelines. These items are not essential in a balanced diet and can contribute to excess energy intake, overweight and obesity and chronic disease if consumed frequently or in large amounts. In general RED choices are:

- high in energy (kilojoules)
- high in saturated fat, added sugar and/or salt
- lacking in important nutrients such as fibre

Sugar-sweetened drinks, deep-fried foods and confectionery are examples of RED choices.

Alcohol is also included in the RED category.

For information about the responsible service of alcohol visit the Victorian Commission for Gambling and Liquor Regulation website at <<https://www.vcgtrvic.gov.au>>.

The RED category also contains foods and drinks that are not recommended for consumption by the general population as part of a normal diet and are for special purposes only. This includes high protein drinks and formulated supplementary sports drinks.



## Guidelines for the RED category

### Limit<sup>9</sup> availability of RED foods and drinks

This includes limiting:

- the range of RED choices offered
- the supply of RED choices in all situations.

If RED choices are provided, offer the smallest portion available. Jumbo sizes of RED foods and drinks should be avoided.

### Avoid promoting or encouraging RED foods and drinks

This includes:

- promotional materials on counters, cabinets, fridges, vending machines, menu boards, staff notice boards, in lifts and via promotional stands and product displays
- meal or point of sale promotions which include RED choices, for example meal deals, two for one deals, upsizing and supersizing.

### Limit the display of RED foods and drinks

RED choices should not be displayed in excessive quantities or in prominent areas including:

- at eye level in cabinets, fridges, refrigerated cabinets, bain maries, vending machines or on shelves
- on reception desks or counters in waiting areas, at entrances and exits of food outlets, beside cash registers and in dining areas.



<sup>9</sup> In some instances (for example, workplace catering) RED items must be avoided completely. Refer to the setting-specific Healthy Choices policy documents for more information.

## Foods and drinks in the RED category

Below is a summary of foods and drinks in the RED category. For more RED choices refer to the Common foods and drinks classification guide (Section 5).

### Confectionery

All types including lollies (boiled, soft), jelly, juice jellies, jelly beans, liquorice, marshmallow, regular mints, bubble gum, carob, chocolate, chocolate spreads (such as chocolate and hazelnut spread), hundreds and thousands, sprinkles, syrups, chocolate coating, carob coating, yoghurt-flavoured coating

### Saturated and trans fats and oils

- Butter, dairy-blend spreads
- Lard, tallow, copha, ghee, cooking margarine
- Cream
- Palm oil, cottonseed oil
- Coconut oil, coconut cream, regular coconut milk

### Fried foods

- Foods fried in large amounts of oil (such as schnitzel)
- Deep-fried foods

### Frozen ice confection

Sugar-sweetened ice blocks, ice crushes (slushies, slurpees<sup>10</sup>), fruit or water-based gelato and sorbet



### Single hot-food items, ready to eat meals and snack foods

Items that do not meet the AMBER nutrient criteria (pages 21–22). This includes many:

- savoury pastries such as pies, sausage rolls and pasties
- crumbed and coated meat products such as schnitzels
- sausages, frankfurts, saveloys and chorizo
- processed meats such as Devon, Strasburg, salami, kabana and bacon
- savoury snack foods, biscuits and crisps
- cakes, slices and sweet pastries
- sweet snack foods, bars and biscuits
- ice-creams, milk or soy-based ice confections and dairy desserts

### Sweet spreads and toppings

- Jam
- Chocolate spreads
- Syrups
- Condensed milk
- Honey
- Sugar
- Sprinkles

### Drinks

- Sugar-sweetened drinks such as soft drinks, flavoured waters, flavoured mineral waters, flavoured teas, fruit drinks (less than 99 per cent fruit juice), cordials, sports waters, sports drinks, energy drinks<sup>10</sup>, ice crushes (Slurpees<sup>10</sup>), slushies). Sugar-sweetened drinks should be provided in the smallest serve size available (for example 200–375 ml cans)
- Artificially sweetened energy drinks in serve sizes over 250 ml
- Flavoured milk and flavoured milk alternatives that are more than 1600 kJ per serve as sold
- Alcoholic drinks (for example, beer, liqueurs, port, sherry, spirits, wines, mixed alcoholic drinks)
- High protein drinks and protein shakes over 300 ml

<sup>10</sup> All products containing caffeine (for example, energy drinks) must comply with the FSANZ Food Standards Code 2.6.4.

# When selecting from the NUFC Canteen...

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## DRINKS



Pick fresh  
Play fresh

Water

Tea or Coffee

Fruit Boxes

Powerade

Soft Drinks

## SNACKS



Pick fresh  
Play fresh

Fruit Cups

Piece Of Fruit

Plain Popcorn

Pack mixed fruit or sultanas

Chocolate bars

Lollies

Chips

# When selecting from the NUFC Canteen...

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## COLD



Pick fresh  
Play fresh

Chicken Or Ham Salad Roll

Chicken, Cheese & Mayo Sandwich

Egg And Lettuce Sandwich

Afternoon Tea

Afternoon Tea With Tea/Coffee

Assorted Slices

## HOT



Pick fresh  
Play fresh

Soup

Dim Sims -Fried/Steamed

Pies/Pasties

Sausage Rolls

Hot Dogs

Bucket Of Chips

Bucket Of Chips W 3 Nuggets

Potato Cakes

Hot Jam Donuts

# References & Further Resources:

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Desbrow, B., McCormack, J., Burke, L. M., Cox, G. R., Fallon, K., Hislop, M., Logan, R., Marino, N., Sawyer, S. M., Shaw, G., Star, A., Vidgen, H., & Leveritt, M. (2014). Sports Dietitians Australia Position Statement: Sports Nutrition for the Adolescent Athlete. *International Journal of Sport Nutrition and Exercise Metabolism*, 24, 570-584. <http://dx.doi.org/10.1123/ijsem.2014-0031>

Water Factsheet: [8521-VCH-Hydration-junior-sport-v3.pdf \(sportsdietitians.com.au\)](https://www.sportsdietitians.com.au/8521-VCH-Hydration-junior-sport-v3.pdf)

Nutrition for the Junior Athlete: [SDA Factsheet \(sportsdietitians.com.au\)](https://www.sportsdietitians.com.au/SDA-Factsheet)

[Healthy choices: food and drink classification guide: A system for classifying foods and drinks](#)

**Further information:** Sports Dietitians Australia website <https://www.sportsdietitians.com.au/>