

# Food and energy

## What does 'energy' in food really mean?

- To many of us the word energy means 'power', 'vitality', 'get up and go'
- In fact, eating a high energy food will not give you a surge of power but will give you a load of kilojoules (calories)!
- Food energy is measured in kilojoules just like distance is measured in kilometres.

We burn energy through activity and body processes (e.g. breathing, heart pumping). When we take in more energy than we need, it is stored as body fat, which leads to weight gain.

## Energy content of nutrients

1 gram fat*	=	38 kilojoules (9 calories)
1 gram starch/sugar (carbohydrate)	=	16 kilojoules (4 calories)
1 gram protein	=	16 kilojoules (4 calories)

\* Fat is the most concentrated source of energy

## Energy-dense foods are:

- high in fat and/or sugar
- often processed foods, low in micronutrients (vitamins and minerals).

## Low energy-dense foods are:

- high in water and fibre
- high in micronutrients e.g. vegetables, fruit, legumes (beans, lentils), wholegrains.

## Foods with the same energy content

Fish & Chips (2 fish, serve of chips)	=	44 pieces of sushi
Burger & Fries	=	7 slices lean beef 5 baked potatoes
Large cookie	=	3 ½ fruit buns

**With lower energy foods we tend to fill up before we take in too much energy.**

## Dilute the energy in meals - add vegetables!

### Tips:

- add frozen peas and corn to noodles
- add canned tomatoes and canned beans to mince and stews
- add lots of tomato based sauce and vegetables to pasta dishes.

## Sugary drinks

### (soft drinks, fruit juice, energy drinks)

Energy in a liquid form is not 'filling' so we do not reduce our food intake to take account of the energy from sugar in drinks. If these drinks are consumed often, the end result can be excess energy and weight gain.

### Tips:

- water is best
- if you usually choose soft drinks go for diet drinks instead; these contain no energy or sugar.

## Auckland Regional Public Health Service

Rātonga Hauora ā Iwi o Tamaki Makaurau



Working with the people of Auckland, Counties Manukau and Waitemata