Khana Kakana - A taste of Fiji

Study notes (to accompany the book)

Read the pages indicated and answer the following questions in your exercise book.

Page 4 (in the Khana Kakana book)

1. What are high quality foods?
2. What are low quality foods?
3. What could be wrong with vegetable oil?
4. What is the recommended average number of calories to consume per day?
5. What lifestyle diseases can be caused by carrying too much fat on the body?
6. What are calories? (Read the extract below.)
7. Name 3 foods that are high in calories and 3 foods that are low in calories.

Note: Another problem with some vegetable oils is that they have been highly heated, making them 'carcinogenic'. This means that using these oils too often may contribute to cancer. Oils that do not become 'carcinogenic' when heated are olive oil, coconut oil and butter.

Calories are units of energy that a food or drink provides. We need calories to give us enough energy to move around, stay warm, grow, work, think, and play. Even our blood circulation and digestion need the energy gained from calories in order to function well.

How many calories we need each day depends on our age, whether we're trying to lose weight, how active we are, and several other factors. There are calories in each of the three main macronutrients that we eat – carbohydrates, fats and proteins.

Carbohydrates - are sugary or starchy foods such are bread, rice, potatoes, cassava and any sweet food.

Fats – can be fats that goes solid in the fridge, like butter or coconut oil. Fats can also be liquid oils like coconut oil. There are also fat in natural foods such as nuts and avocado.

Protein – These are foods that build muscles, like meat, fish and eggs. Lentils or dahl are half protein, half carbohydrate.

Each macronutrient contains the following calories per gram:

- Carbohydrate: 4 calories
- Fat: 9 calories
- Protein: 4 calories

https://www.livescience.com/52802-what-is-a-calorie.html

Page 5

1. Choose the foods you would like to eat in one day from the breakfast, lunch and dinner examples on page 5.

Snacks – These are only necessary while you are still growing and developing. Adults do not need to eat snacks in between meals, if they eat good, healthy meals.

Drinks – Water is best. Coconut water is good. A better option to tea and coffee would be lemon leaf or herbal tea. Adding sugar or honey to drinks would be called 'empty calories'. This means adding calories that don't offer you nutritional benefit, and are unnecessary. It's better to train your tastebuds to go without sugar or honey in your drinks.

2. What does the 'working it out by hand' section tell us? What is the main idea?

Page 6

1. Foods with high carbohydrates should be served in small portions. Give examples of 3 foods that are high in carbohydrates.
2. Which Fijian foods are high in carbohydrates?

Did you know?

Oily or fatty foods eaten together with high carbohydrate foods cause weight gain. Therefore, chips will cause weight gain because they have both oil and carbs combined. However, a meal of meat or fish with salad has no carbohydrates and therefore will not cause weight gain, even though the fish is oily or the meat is fatty. If you eat very little or no foods containing starchy cards or sugar, but eat good fats with protein foods and coloured vegetables you will not put on weight.

3. What are protein foods? Make a list.

4. Coloured vegetables such as carrots and pumpkin are carbohydrate foods, but these are good carbs, (not too starchy). You can eat larger portions of coloured vegetables, especially salad vegetables. (Corn is an exception. Although it's coloured, it is very starchy.) Make a list of coloured vegetables that would be good to eat.

Page 7

Explain the advantages and disadvantages of *lovo style* cooking.

Page 8

1. What are the 5 important aspects of a healthy meal?
2. List some high fibre foods.
3. List some foods that are high in iron.

Page 9

What are the benefits of eggs?

Find out on page 14.

Page 10

What were the two key factors in Maria's weight loss?

Page 11

1. What are the nutritional benefits of garlic?
2. Are there any starchy carbs in the meal on page 11?
3. If we take the principle that it's starchy carbs and fat eaten together that causes weight gain, would it be necessary to have low fat milk in this recipe (instead of regular milk).

Pages 12 – 13

Read the following article and then answer the questions.

The glycaemic index

The glycaemic index is a measure used to determine how much a food can affect your blood sugar levels. Several factors affect the glycaemic index of a food, including the ripeness, nutrient composition, and cooking method.

The glycaemic index is a tool that's often used to promote better blood sugar management.

Several factors influence the glycaemic index of a food, including its nutrient composition, cooking method, ripeness of fruits, and the amount of processing food has undergone.

The glycaemic index can not only help increase your awareness of what you're putting on your plate but also enhance weight loss, decrease your blood sugar levels, and reduce your cholesterol.

The glycaemic index (GI) is a value used to measure how much specific foods increase blood sugar levels.

Foods are classified as low, medium, or high glycaemic foods and ranked on a scale of 0–100.

The lower the GI of a specific food, the less it may affect your blood sugar levels.

Here are the three GI ratings:

Low: 55 or less
Medium: 56–69
High: 70 or above

Foods high in refined carbs and sugar are digested more quickly and often have a high GI, while foods high in protein, fat, or fibre typically have a low GI. Foods that contain no carbs are not assigned a GI and include meat, fish, poultry, nuts, seeds, herbs, spices, and oils.

Other factors that affect the GI of a food include the ripeness, cooking method, type of sugar it contains, and amount of processing it has undergone (2Trusted Source).

Keep in mind that the glycaemic index is different from the glycaemic load (GL).

Unlike the GI, which doesn't take into account the amount of food eaten, the GL factors in the number of carbs in a serving of a food to determine how it may affect blood sugar levels (3Trusted Source).

For this reason, it's important to take both the glycaemic index and glycaemic load into consideration when selecting foods to help support healthy blood sugar levels (3Trusted Source).

SUMMARY
The glycaemic index is used to measure how much a specific food increases your blood sugar levels. The higher the GI, the greater the effect on blood sugar levels.

Low glycaemic diet
The low glycaemic diet involves swapping out foods with a high GI for those with a lower GI.

Benefits
Following a low glycaemic diet may offer several health benefits, including:

Improved blood sugar regulation. Many studies have found that following a low GI diet may reduce blood sugar levels and improve blood sugar management in people with type 2 diabetes (3Trusted Source, 4Trusted Source).

https://www.healthline.com/nutrition/glycemic-index#low-glycemic-diet

Glycaemic Index Food Chart

https://www.verywellhealth.com/glycemic-index-chart-for-common-foods-1087476

Low-GI Foods (55 or Less)

Apple 36
Apple juice 41
Banana 51
Carrots, boiled 39
Chickpeas 28
Chocolate 40
Dates 42
Ice cream 51
Kidney beans 24
Lentils 32
Mango 51
Orange 43
Orange juice 50
Peaches, canned 43
Plantain 55
Rice noodles 53
Rolled oats 55
Skim milk 37
Soya beans 16
Soy milk 34
Spaghetti, white 49
Spaghetti, whole grain 48
Sweet corn 52
Taro, boiled 53
Vegetable soup 48
Whole milk 39
Yogurt, flavoured 41

Medium-GI Foods (56 to 69)

Brown rice, boiled 68
Couscous 65
French fries 63
Muesli 57
Pineapple 59
Popcorn 65
Potato chips 56
Pumpkin, boiled 64
Soda, non-diet 59
Sweet potato, boiled 63
Wheat flake biscuits cereal 69
Wheat roti 62

High-GI Foods (70 to 100)

Cornflakes 81
Potato, boiled 78
Potatoes, mashed 87
Rice crackers 87
Watermelon 76
White rice, boiled 73
White bread (wheat) 75
Whole wheat bread 74

Page 12 – 13 (continued)

1. In point 7 on page 13, we are told that mangoes have a low glycaemic index. What does this mean?
2. What special benefits do citrus fruits have?
3. Choose any other 4 fruits and list the benefits.
4. Why is natural or Greek yoghurt better than flavoured yoghurt?
5. God created colourful fruits for our enjoyment and for our health. Fruits contain vitamins, minerals and antioxidants. Why do we need vitamins and minerals?
6. Read the following article and answer the questions.

Antioxidants: Key Facts

Antioxidants protect your body from free radicals. A free-radical is an unstable atom. Free-radicals can cause damage to your body. Antioxidants can help prevent the health issues caused by free radicals. Your body makes antioxidants, but you can also get them from food.

Antioxidants are substances produced by your body that play an important role in your health. They are also found in foods, especially fruits and coloured vegetables. There are many different types of antioxidants.

Why are antioxidants important?

Many chemical reactions take place inside the cells in your body. Sometimes, these form by-products known as free radicals. Free radicals have important roles in your body. Some are used by your body's immune system to attack viruses or bacteria.

However, if free radicals build up in your body, they can cause 'oxidative stress'. This can damage your cells and impact your health.

Oxidative stress can damage your eyes, heart, brain, joints, lungs and kidneys.

Antioxidants are able to prevent the negative effects of these free radicals by neutralising them.

https://www.healthdirect.gov.au/antioxidants

Pages 12-13 (continued)

Explain what antioxidants are, in three sentences. Why are they important? Which foods are high in antioxidants.

Pages 14-15

1. Why is wholegrain bread better than white bread?
2. Wholegrain and white bread both contain starchy carbs. Should we decide to eat more bread just because it is wholegrain?
3. Why would it be an advantage to add coloured fruits to your oat porridge?
4. Design a healthy breakfast menu for 7 days of the week, giving variety over the week.

Page 16

1. Margarine contains preservatives, trans-fats, and is manufactured by heating oil to very high temperatures. Why would butter be a better option than margarine to spread on your pumpkin scones?
2. Why is lemon leaf tea better than regular tea?
3. Drinking in-between meals, (and not with meals), is a good practice because your food will digest better if your stomach is not flooded with liquid. This means you will get more nutrients out of your food. What is a good time frame to avoid drinks?

Page 17

Match the meal on the left with the correct nutritional elements on the right. They are in jumbled order,

• Beans • Eggs • Vegetables • Leafy vegetables	• give us iron & vitamins • give us protein & fibre • give us protein & good fats • give us vitamins and minerals

Page 18

1. Which of these would be suitable ways to eat snacks and why?
   a) Eat your snack on a plate.
   b) Eat your snacks out of the packet while you are watching TV.
   c) Finish your snack in one sitting and that's the end of it.
2. List some unhealthy snacks that should be avoided, or at best, eaten rarely.
3. Should you snack if you are not hungry? Give reason.

Page 19

Draw up a personal exercise program. List the days of the week you will be committing to it, and the type of exercise you will be doing. Also show the time allocation to each period of exercise. Show this in table form.

Pages 20-23

Make a list of raw or lightly cooked vegetables you could add as a side dish to the meals on pages 20-23.

Pages 24-25 Salads

Why are raw vegetables more nutritious that cooked vegetables? How 'cooked' should cooked vegetables be?

Page 30 - 33

Make a list of natural flavours you can add to your cooking.

Page 35

1. Make a list of different types of legumes.
2. How can lentils be used in main dishes?
3. Note that soaking legumes overnight, or for several hours BEFORE Step 1 will shorten the time needed for boiling the legumes. Find out which legumes take the longest time to cook and which take the shortest?

Pages 36 – 37

Prepare some of these dishes.

Page 38 – 39

1. Why doesn't cassava, dalo or yam count in your '3 vegetable servings per day'?
2. Why is it good to keep the skin on eggplant and cucumber?
3. Which vegetables are high in antioxidants?
4. Which vegetables are good for heart health?
5. Which vegetables are good for your eyes?
6. Which vegetables are good for your immune system?
7. How much of your plate should coloured vegetables take up?

Page 40

Try making some of these vegetable dishes.

Page 44

1. What are non-communicable diseases?
2. What are the 4 main risk factors that lead to non-communicable diseases in Fiji?

Pages 46 – 47

Try growing some herbs or vegetables.