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**NUTRITION KNOWLEDGE QUESTIONNAIRE FOR**  
**13-19 YEAR OLDS BASED ON THE FOOD-BASED**  
**DIETARY GUIDELINES**

**INSTRUCTIONS**

THE FOLLOWING QUESTIONNAIRE CONTAINS TWO TYPES OF QUESTIONS,

MULTIPLE CHOICE AND TRUE/ FALSE

1. MULTIPLE CHOICE: CHOOSE **ONE** THAT YOU THINK IS THE CORRECT ANSWER AND  
TICK ON THE NUMBER THAT IS NEXT TO YOUR ANSWER

2. TRUE/ FALSE: CHOOSE THE **TRUE** OR THE **FALSE** AND TICK ONE OF THEM WHICH  
YOU THINK IS THE CORRECT ANSWER

THE QUESTIONS REFER TO A HEALTH PERSON WHO IS NOT ON ANY MEDICATION OR  
SPECIAL DIET

Please answer all the questions before moving on to the next ones.

**Do not page back!**

DATE

YY	MM	DD
<input type="text"/>	<input type="text"/>	<input type="text"/>

SUBJECT NUMBER

1 You should eat a lot of sugar to have enough energy 

TRUE	FALSE
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 11A

2 Cooked meat/ fish/ chicken sold on the street may not always be safe to eat because

It may have been undercooked	1	6D
The cook may not have used fresh meat	2	
It may have been kept for a long time before being cooked	3	
All of the above	4	

3 What a pregnant woman eats during pregnancy has no effect on her health and the health of her unborn baby 

TRUE	FALSE
------	-------

 12

4 You should not have starches at most meals because

They are not important for your health	1	3B
Even eating small amounts can cause weight gain	2	
They cause diseases	3	
None of the above	4	

5 How much water should you drink a day

You don't have to drink water everyday	1	9A
1 to 3 glasses	2	
4 to 6 glasses	3	
7 to 9 glasses	4	

6 You should add extra salt to your cooked food before you even eat it 

TRUE	FALSE
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 8A

7 What is a portion of cooked vegetables?

1 Tablespoon	1	4A
Half a cup	2	
1 Cup	3	
2 Cups	4	

8 Which of the following is a low fat snack

"Simba" Chips	1	7A
Popcorn	2	
Fried chips	3	
"Niknaks"	4	

9 From which group of foods should you eat the most every day?

Bread, samp, rice, porridge	1
Apples, bananas, spinach, carrots	2
Milk, yogurt, cheese	3
Chicken, fish, beans, eggs	4

3A

10 Drinking a lot of wine, beer, cider can cause weight gain

TRUE	FALSE
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10B

11 Which one of the following is not healthy for a pregnant woman to do

Be physically active	1
Eat different kinds of foods	2
Sleep most of the day	3
Drink lots of water	4

12

12 Women must try not to gain weight when they are pregnant

TRUE	FALSE
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12

13 It is not healthy for a pregnant woman to eat foods like milk, cheese, yoghurt

TRUE	FALSE
------	-------

12

14 People who are overweight should not be physically active

TRUE	FALSE
------	-------

2B

15 It is usually not necessary to wash vegetables before you cook them

TRUE	FALSE
------	-------

4D

16 The key to a healthy way of eating is to

Eat many different kinds of foods	1
Eat some foods more than other foods	2
Eat certain kinds of foods in moderate or small amounts	3
All of the above	4

1A

17 The following foods must not be eaten at all when one is trying to lose weight

Bread and rice	1
Meat and fish	2
Margarine	3
None of the above	4

1A

18 Which foods contain a lot of calcium?

Chicken and eggs	1
Milk, yoghurt	2
Pilchards	3

2 and 3	4	6C
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19 The healthiest snack is:

A glass of milkshake	1	
A tub of unbuttered popcorn	2	
A slab of chocolate	3	
2 and 3 above	4	7A

20 To which of the following foods has iodine been added?

Bread	1	
Maize meal	2	
Table salt	3	
Powdered milk	4	8C

21 If you were trying to increase the amount of fibre in your diet, which one of the following foods should you eat more of?

Cakes and biscuits	1	
Apples and carrots	2	
Chips and pies	3	
Chicken and fresh fish	4	4C

22 Being physically active means

Going to the gym	1	
Walking a lot	2	
Playing sports like soccer or netball	3	
All of the above	4	2A

23 Which of the following choice of foods prevent certain diseases

Fish, Chicken without skin, and lean meat	1	
Beef sausage, bacon, and lean mince	2	
Fried fish, fried chicken, and regular mince	3	
All of the above	4	6A

24 Which foods contain a lot of fibre?

Oats, apples, beans	1	
Milk, yoghurt, cheese	2	
Beef, chicken, mutton	3	
Butter, margarine	4	1C

25 How many fruits and vegetables should be eaten

1 fruit and vegetable a day	1
3-4 fruits and vegetables a day	2

5 or more fruits and vegetables everyday	3	
There is no need to eat fruits and vegetables daily	4	4A

26 If you are eating a healthy diet there is no need for you to be physically active

TRUE	FALSE	2A
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27 Drinking boiled water is a good way to lose weight

TRUE	FALSE	9B
------	-------	----

28 Salt should be added to all foods except fruits

TRUE	FALSE	8A
------	-------	----

29 If one wants to lose weight there is no need to be physically active, it is better that one simply diets

TRUE	FALSE	2B
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30 All water is safe to drink

TRUE	FALSE	9A
------	-------	----

31 You can drink as much wine, beer, ciders as you want provided you have eaten first

TRUE	FALSE	10A
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32 A little sugar can be eaten when one is trying to lose weight

TRUE	FALSE	11B
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33 How much milk or maas should you have a day?

None	1	
Half a cup	2	
One cup	3	
Two cups	4	6A

34 Your body only needs a little bit of salt to be healthy

TRUE	FALSE	8A
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35 A well- balanced diet

Consists mostly of meat, with smaller amounts of starch, fruits, vegetables, and dairy products	1	
Consists mostly of vegetables, and smaller amounts of meat and dairy products	2	
Consists mostly of starches, vegetables and fruits, with smaller amounts of meat and dairy products	3	
None of the above	4	3A

36 Sugar and foods that contain sugar should be eaten in small amounts

TRUE	FALSE	11A
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37 Eating a lot of different kinds of foods is healthier than eating only a few kinds of foods

TRUE	FALSE	1A
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38 Overweight women should try to lose weight when they are pregnant

TRUE	FALSE	12
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39 Sugar contains a lot of vitamins and minerals

TRUE	FALSE	11A
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40 It is impossible to *get all* the vitamins and minerals you need from food, you need to take a vitamin and mineral pill

TRUE	FALSE	1A
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41 It is not healthy for a pregnant woman to drink a lot of wine, beer, cider

TRUE	FALSE	12
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42 Which one of the following groups of nutrients are found in large amounts in fruits and vegetables?

Fibre, Vitamin A	1	4C
Starches, fat, Vitamin D	2	
Fats, Iron, Calcium	3	
None of the above	4	

43 Which of the following breakfast menus contain little fat

Whole-wheat toast with thinly spread margarine	1	7A
Weet-Bix with 2% fat milk	2	
Bacon and egg	3	
1 and 2	4	

44 It is important for a pregnant women to avoid eating different kinds of foods

TRUE	FALSE	12
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45 Which food has the most fibre?

White rolls	1	3C
Brown bread	2	
White bread	3	
Whole wheat bread	4	

46 The best place to defrost meat from a frozen state is to

leave it at room temperature	1
leave it in the fridge	2

leave it in sunlight	3	6D
Meat should never be defrosted	4	

47 Starchy foods should not be eaten when one is trying to lose weight

TRUE	FALSE	3B
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48 To make sure that you stay healthy you should eat

Lean meat, fruits and vegetables, low fat dairy products, and breads and cereals	1	7A
Fruit and vegetables only	2	
Bread, cereals, fruit and vegetables only	3	
Low fat dairy products and lean meat only	4	

49 Eating bread always causes weight gain

TRUE	FALSE	3B
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50 Which of the following foods are the lowest in fat:

Corn flakes and full cream milk	1	7A
Grilled lean steak and boiled carrots	2	
Pizza and milkshake	3	
Fried lamb chops and creamed spinach	4	

51 To protect yourself from disease you should avoid eating many different kinds of foods

TRUE	FALSE	1B
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52 It is healthy to snack on foods that contain a lot of sugar

TRUE	FALSE	11B
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53 Which of the following should a pregnant woman eat more of?

Milk, cheese, maas	1	12
Meat, chicken, fish	2	
Fruits and vegetables	3	
All of the above	4	

54 Dry beans, peas, and lentils should be eaten often

TRUE	FALSE	5A
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55 Soya mince is as healthy as meat

TRUE	FALSE	5A
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56 You can eat as much meat as you want everyday

TRUE	FALSE	5A
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57 Which group of foods has the most Vitamin A?

Oats, whole wheat bread, rice	1	4C
Carrots, spinach, sweet potatoes	2	
Pies, cakes, pudding	3	
None of the above	4	

58 Dry beans, peas, lentils are a healthy choice to eat in place of meat

TRUE	FALSE	5A
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59 Meat/ fish/ chicken will not spoil if you store them

In the cupboard for a few days	1	6D
In the fridge for 2 days only	2	
In the freezer for 3-4 months	3	
In 2 and 3 above	4	

60 The reason why beans, peas and lentils are good for you is that

They contain only small amounts of fat	1	5B,C
They contain a lot of fibre	2	
They can protect you from some diseases	3	
All of the above	4	

**SELECT YES OR NO FOR ALL THE CHOICES**

1. From where do you get your information about nutrition?

	YES	NO	
School	1	2	13F
Peers/ Friends	1	2	13F
Parents	1	2	13F
Radio/ TV/ Magazines	1	2	13F
Other (Specify)			
	1	2	13F

2. Of the choices you have selected above, how would you rate them as sources of information:

1= very unreliable

2= unreliable

3= reliable

4= very reliable

	very unreliable	unreliable	reliable	very reliable	
School	1	2	3	4	13G
Peers/ Friends	1	2	3	4	13G
Parents	1	2	3	4	13G
Radio/ TV/ Magazines	1	2	3	4	13G
Other (Specify)					
	1	2	3	4	13G

**Summary:** This valid and reliable nutrition knowledge questionnaire was developed for urban South African adolescents participating in the Birth-to-Twenty (BTT) cohort study. The questionnaire was intended for use every second year, starting from when the group was aged 13-14 years (2004), until they turn twenty. The 60-item questionnaire's construct is based on the recently developed SA food-based dietary guidelines and validated norms are available for the interpretation of percentage scores obtained on the questionnaire

**References:** Whati LH, Senekal MS, Steyn NP, Nel JH, Lombard C, Norris S. Development of a valid and reliable nutrition knowledge questionnaire for urban South African adolescents. 2005, *Nutrition*; 21: 76-85

**Table 1: Categorization of items in questionnaire based on the South African food-based dietary guidelines**

Grouping	No. of Items	Item's Numbering in Questionnaire
Guideline 1	6	16, 17, 24, 37, 40, 51
Guideline 2	4	14, 22, 26, 29
Guideline 3	6	4, 9, 35, 45, 47, 49
Guideline 4	6	7, 15, 21, 25, 42, 57
Guideline 5	5	54, 55, 56, 58, 60
Guideline 6	6	2, 18, 23, 33, 46, 59
Guideline 7	5	8, 19, 43, 48, 50
Guideline 8	4	6, 20, 28, 34
Guideline 9	3	5, 27, 30
Guideline 10	2	10, 31
Guideline 11	5	1, 32, 36, 39, 52

Nutrition in Pregnancy (12)	8	3, 11,12, 13, 38, 41, 44, 53
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**Table 2: Norm referenced performance–rating scale for the nutrition knowledge questionnaire developed by Whati *et al*, 2005**

<b>Stanine</b>	<b>Performance score (%)</b>	<b>Interpretation</b>
1	<34	Very poor
2-4	34-51	Fair/ below average
5	52-57	Good/ average
6-9	58-75	Very good/ above average
9	76 +	Excellent