

# National Testing Agency

<b>Question Paper Name :</b>	Functional Foods and Nutraceuticals 28th August 2021 Shift 2
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## Functional Foods and Nutraceuticals

<b>Group Number :</b>	1
<b>Group Id :</b>	94091815
<b>Group Maximum Duration :</b>	0
<b>Group Minimum Duration :</b>	120
<b>Show Attended Group? :</b>	No
<b>Edit Attended Group? :</b>	No
<b>Break time :</b>	0
<b>Group Marks :</b>	100
<b>Is this Group for Examiner? :</b>	No

## Functional Foods and Nutraceuticals-1

<b>Section Id :</b>	94091829
<b>Section Number :</b>	1
<b>Section type :</b>	Online
<b>Mandatory or Optional :</b>	Mandatory

<b>Number of Questions :</b>	100
<b>Number of Questions to be attempted :</b>	100
<b>Section Marks :</b>	100
<b>Enable Mark as Answered Mark for Review and Clear Response :</b>	Yes
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	94091853
<b>Question Shuffling Allowed :</b>	Yes

**Question Number : 1 Question Id : 940918860 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0**

Dr Stephen DeFelice coined the term "Nutraceutical" from "Nutrition" and " \_\_\_\_\_ " in 1989.

1. Physicochemical
2. Phytochemical
3. Pharmaceutical
4. Pharmacognosy

**Options :**

9409182903. 1

9409182904. 2

9409182905. 3

9409182906. 4

**Question Number : 2 Question Id : 940918861 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0**

European Union established a science-based approach for concepts in functional food science as \_\_\_\_\_ in 1996.

1. Foods with Function Claims (FFC)
2. Foods for Specified Health Uses (FOSHU)
3. Functional Food Science in Europe (FUFOSE)
4. Dietary Supplement Health Education Act (DSHEA)

**Options :**

9409182907. 1

9409182908. 2

9409182909. 3

9409182910. 4

**Question Number : 3 Question Id : 940918862 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Ascorbic acid,  $\beta$ -Carotene and Tocopherols have\_\_\_\_\_ activity in common.

1. Antioxidant
2. Anti-cancer
3. Anti-inflammatory
4. Antibiotic

**Options :**

9409182911. 1

9409182912. 2

9409182913. 3

9409182914. 4

**Question Number : 4 Question Id : 940918863 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

\_\_\_\_\_ are foods from which harmful components have been removed, reduced or replaced with another substance with beneficial effects.

1. Fortified foods
2. Enriched foods
3. Altered products
4. Enhanced commodities

**Options :**

9409182915. 1

9409182916. 2

9409182917. 3

9409182918. 4

**Question Number : 5 Question Id : 940918864 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

n-3, PUFA, Conjugated linoleic acid and MUFA are\_\_\_\_\_.

1. carbohydrates and their derivatives
2. proteins and amino acids
3. fatty acids
4. minerals

**Options :**

9409182919. 1

9409182920. 2

9409182921. 3

9409182922. 4

**Question Number : 6 Question Id : 940918865 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

\_\_\_\_\_ is a unique cancer preventive, anti-inflammatory and cholesterol- reducing peptide found in cereals -barley, rye, wheat.

1. Lunasinis
2. Saponins
3. Diosgenin
4. Catechins

**Options :**

9409182923. 1
9409182924. 2
9409182925. 3
9409182926. 4

**Question Number : 7 Question Id : 940918866 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

The left side of the colon has less carbohydrate fermentation, the pH is less acidic and it is associated with \_\_\_\_\_.

- A. an increase in proteolysis
- B. production of harmful nitrogenous products
- C. production of phenolic compounds
- D. decrease in proteolysis

Choose the **correct** answer from the options given below:

1. A, C and D only
2. A, B and C only
3. B, C and D only
4. A, B and D only

**Options :**

9409182927. 1
9409182928. 2
9409182929. 3

9409182930. 4

**Question Number : 8 Question Id : 940918867 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Postbiotics are\_\_\_\_\_.

- A. viable bacterial products
- B. non-viable bacterial products
- C. metabolic byproducts from probiotic microorganisms
- D. metabolic byproducts from pathogenic microorganisms

Choose the **correct** answer from the options given below:

- 1. A, B and C only
- 2. B, C and D only
- 3. A and D only
- 4. B and C only

**Options :**

9409182931. 1

9409182932. 2

9409182933. 3

9409182934. 4

**Question Number : 9 Question Id : 940918868 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

\_\_\_\_\_are combinations of probiotics and prebiotics designed to improve the survival of ingested microorganisms and their colonization in the intestinal tract.

- 1. Antibiotics
- 2. Synbiotics
- 3. Postbiotics
- 4. Symbiotics

**Options :**

9409182935. 1

9409182936. 2

9409182937. 3

9409182938. 4

**Question Number : 10 Question Id : 940918869 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Biochemically *Lactobacillus* preferably ferments only \_\_\_\_\_.

A. Lactose

B. Maltose

C. Glucose

D. Fructose

1. A and B only
2. B and C only
3. C and D only
4. A and D only

**Options :**

9409182939. 1

9409182940. 2

9409182941. 3

9409182942. 4

**Question Number : 11 Question Id : 940918870 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

*Bifidobacterium* is\_\_\_\_\_.

1. sluggishly motile
2. highly motile
3. non motile
4. motile

**Options :**

9409182943. 1

9409182944. 2

9409182945. 3

9409182946. 4

**Question Number : 12 Question Id : 940918871 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

The optimum pH for Lactic acid bacteria to give maximum growth varies between\_\_\_\_\_.

1. 3 to 5
2. 5.5 to 7
3. 7 to 9
4. 9 to 11

**Options :**

9409182947. 1

9409182948. 2

9409182949. 3

9409182950. 4

**Question Number : 13 Question Id : 940918872 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

To cause infection, pathogenic bacteria after penetrating intestinal mucosa must adhere to \_\_\_\_\_.

1. heterocytes
2. leucocytes
3. enterocytes
4. myocytes

**Options :**

9409182951. 1

9409182952. 2

9409182953. 3



9409182954. 4

**Question Number : 14 Question Id : 940918873 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

H<sub>2</sub>O<sub>2</sub> kills bacterial cells by\_\_\_\_\_

1. denaturing enzymes
2. degrading DNA
3. degrading cell wall
4. All of the options are correct

**Options :**

9409182955. 1

9409182956. 2

9409182957. 3

9409182958. 4

**Question Number : 15 Question Id : 940918874 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Antimicrobial factors produced by probiotics are\_\_\_\_\_

- A. saccharides
- B. short chain fatty acids
- C. bacteriocin
- D. hydrogen peroxide

Choose the **correct** answer from the options given below:

1. A, B and C only
2. B, C and D only
3. A, B and D only
4. A, C and D only

**Options :**

9409182959. 1

9409182960. 2

9409182961. 3

9409182962. 4

**Question Number : 16 Question Id : 940918875 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

\_\_\_\_\_ is the only purified bacteriocin approved for use in the product intended for human consumption.

1. Peptone
2. Nisin
3. Gluten
4. Gelatin

**Options :**

9409182963. 1

9409182964. 2

9409182965. 3

9409182966. 4

**Question Number : 17 Question Id : 940918876 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

\_\_\_\_\_ is the method used to increase probiotic stability.

1. Microencapsulation
2. Embedding
3. Covalent modification
4. Entrapment

**Options :**

9409182967. 1

9409182968. 2

9409182969. 3

9409182970. 4

**Question Number : 18 Question Id : 940918877 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

The label of probiotic product should show \_\_\_\_\_

- A. genus, species and strain designation
- B. minimum viable number of each probiotic strain
- C. evidence based animal claims
- D. evidence based human claims

Choose the **correct** answer from the options given below:

- 1. A, B and C only
- 2. B, C and D only
- 3. A, B and D only
- 4. A, C and D only

**Options :**

9409182971. 1

9409182972. 2

9409182973. 3

9409182974. 4

**Question Number : 19 Question Id : 940918878 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

The incorporation of probiotics into dairy foods may aid in tolerating harsh gastro-intestinal condition better than that of non-dairy carrier foods by \_\_\_\_\_ .

- 1. buffering action of milk
- 2. increasing direct exposure to harsh conditions of GI tract
- 3. non buffering action of milk fat
- 4. All of the options are correct

**Options :**

9409182975. 1

9409182976. 2

9409182977. 3

9409182978. 4

**Question Number : 20 Question Id : 940918879 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

\_\_\_\_\_ is also known as tea mushroom, tea fungus or Manchurian mushroom.

1. Kimchi
2. Kombucha
3. Kefir
4. Kanji

**Options :**

9409182979. 1

9409182980. 2

9409182981. 3

9409182982. 4

**Question Number : 21 Question Id : 940918880 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

High levels of \_\_\_\_\_ are found in colostrum.

1. GOS-galacto oligosaccharides
2. Soy-oligosaccharides
3. Fructo-oligosaccharides
4. Malto-oligosaccharides

**Options :**

9409182983. 1

9409182984. 2

9409182985. 3

9409182986. 4

**Question Number : 22 Question Id : 940918881 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

\_\_\_\_\_ is non-digestible, non-cariogenic, promotes intestinal mineral absorption and is suitable for low-calorie food products.

1. Fructo-oligosaccharides
2. Galacto-oligosaccharide
3. Lacto-sucrose Oligosaccharide
4. Xylo-oligosaccharides

**Options :**

9409182987. 1  
9409182988. 2  
9409182989. 3  
9409182990. 4

**Question Number : 23 Question Id : 940918882 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Water-soluble fibers are most effective for\_\_\_\_\_.

1. decreasing serum LDL cholesterol concentrations
2. decreasing high density lipoprotein (HDL) concentrations
3. increasing serum LDL cholesterol concentrations
4. increasing high density lipoprotein (HDL) concentrations

**Options :**

9409182991. 1  
9409182992. 2  
9409182993. 3  
9409182994. 4

**Question Number : 24 Question Id : 940918883 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

The addition of water soluble dietary fibre in beverages and drinks \_\_\_\_\_.

- A. increases flavour
- B. increases colour
- C. increases viscosity
- D. increases stability

Choose the **correct** answer from the options given below:

- 1. A and B only
- 2. B and C only
- 3. C and D only
- 4. A and D only

**Options :**

9409182995. 1

9409182996. 2

9409182997. 3

9409182998. 4

**Question Number : 25 Question Id : 940918884 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Dietary fibre is defined as the edible parts of plant or analogous carbohydrates that are \_\_\_\_\_.

- 1. not resistant to digestion and absorption in the human small intestine
- 2. not fermented in the large intestine by colon microorganisms
- 3. not digestible after cooking
- 4. digestible after cooking

**Options :**

9409182999. 1

9409183000. 2

9409183001. 3

9409183002. 4

**Question Number : 26 Question Id : 940918885 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Resistant starch is the portion of starch which\_\_\_\_\_.

1. escapes digestive enzymes in small intestine
2. is not resistant to digestion, passes further into colon
3. is not fermented in colon
4. does not produce short chain fatty acids

**Options :**

9409183003. 1

9409183004. 2

9409183005. 3

9409183006. 4

**Question Number : 27 Question Id : 940918886 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

\_\_\_\_\_ resist digestion because of its crystalline structure.

1. RS1
2. RS2
3. RS3
4. RS4

**Options :**

9409183007. 1

9409183008. 2

9409183009. 3

9409183010. 4

**Question Number : 28 Question Id : 940918887 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Functional property of dietary gums is to \_\_\_\_\_.

1. get completely digested
2. get partially digested
3. delay gastric transit time
4. shorten the gastric transit time

**Options :**

9409183011. 1

9409183012. 2

9409183013. 3

9409183014. 4

**Question Number : 29 Question Id : 940918888 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Why natural gum is a good prebiotic?

1. Gum can clear the tooth plaque
2. Gum promotes the growth of probiotic bacteria
3. Gum can bring about easy elimination by softening the stool
4. All the options are correct

**Options :**

9409183015. 1

9409183016. 2

9409183017. 3

9409183018. 4

**Question Number : 30 Question Id : 940918889 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**



Polyphenols are the compounds that contain \_\_\_\_\_ attached to the benzene ring.

1. -NH<sub>2</sub> group
2. -OH group
3. -COOH group
4. -CHO Group

**Options :**

9409183019. 1

9409183020. 2

9409183021. 3

9409183022. 4

**Question Number : 31 Question Id : 940918890 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Health benefits of flavonoids are primarily due to their\_\_\_\_\_.

1. ability to regulate absorption of fat
2. anti-fungal property
3. antioxidant property
4. ability to regulate calcium absorption

**Options :**

9409183023. 1

9409183024. 2

9409183025. 3

9409183026. 4

**Question Number : 32 Question Id : 940918891 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

\_\_\_\_\_ is NOT an example of polyphenols.

1. Flavonoids
2. Stilbenes
3. Lignans
4. Glutathione

**Options :**

9409183027. 1

9409183028. 2

9409183029. 3

9409183030. 4

**Question Number : 33 Question Id : 940918892 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Tannins precipitate proteins and form complexes with \_\_\_\_\_.

- A. starch
- B. cellulose
- C. minerals
- D. fats

Choose the **correct** answer from the options given below:

1. A, B and C only
2. A, B and D only
3. B, C and D only
4. A, C and D only

**Options :**

9409183031. 1

9409183032. 2

9409183033. 3

9409183034. 4

**Question Number : 34 Question Id : 940918893 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

\_\_\_\_\_ is the source of phytoestrogen in wood of pine trees.

1. Coumestans
2. Daidzein
3. Lignans
4. Anthocyanins

**Options :**

9409183035. 1

9409183036. 2

9409183037. 3

9409183038. 4

**Question Number : 35 Question Id : 940918894 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Phytoestrogens maintain bone mineral density (BMD) in postmenopausal women by regulating\_\_\_\_\_.

1. absorption of Vitamin D
2. absorption of proteins
3. formation and resorption of bone
4. excretion of calcium

**Options :**

9409183039. 1

9409183040. 2

9409183041. 3

9409183042. 4

**Question Number : 36 Question Id : 940918895 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

\_\_\_\_\_ are structurally similar to human cholesterol and compete with cholesterol during the process of digestion.

1. Phytoestrogens
2. Phytosomes
3. Phytochromes
4. Phytosterols

**Options :**

9409183043. 1

9409183044. 2

9409183045. 3

9409183046. 4

**Question Number : 37 Question Id : 940918896 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

People with \_\_\_\_\_ should avoid foods or supplements with added plant sterols.

1. Hypercholesteremia
2. Hyperlipidemia
3. Sitosterolemia
4. Hyperglycemia

**Options :**

9409183047. 1

9409183048. 2

9409183049. 3

9409183050. 4

**Question Number : 38 Question Id : 940918897 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

\_\_\_\_\_ are the richest naturally occurring sources of phytosterols.

1. Vegetable oils and their products
2. Cereal products
3. Fruits and Vegetables
4. All of the options are correct

**Options :**

9409183051. 1

9409183052. 2

9409183053. 3

9409183054. 4

**Question Number : 39 Question Id : 940918898 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

\_\_\_\_\_ remain intact unless brought into contact with the enzyme myroinase by pests, food processing or chewing.

1. Organosulphur Compounds
2. Glucosinolates
3. Phytates
4. Phytosterol

**Options :**

9409183055. 1

9409183056. 2

9409183057. 3

9409183058. 4

**Question Number : 40 Question Id : 940918899 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Glucosinloates are bitter \_\_\_\_\_ glycosides found especially in cruciferous plants.

1. Sulphur – containing
2. Magnesium – containing
3. Iron- containing
4. Iodine -containing

**Options :**

9409183059. 1

9409183060. 2

9409183061. 3

9409183062. 4

**Question Number : 41 Question Id : 940918900 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

\_\_\_\_\_ inhibits iodine transport and the incorporation of iodine into thyroglobulin, thereby increasing the proliferation of TSH secretion and thyroid cells.

1. Thiocynate
2. Isothiocynate
3. Thyroxine
4. Sulphoraphane

**Options :**

9409183063. 1

9409183064. 2

9409183065. 3

9409183066. 4

**Question Number : 42 Question Id : 940918901 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

\_\_\_\_\_are present in orange and red fruits and vegetables.

1.  $\beta$ -cryptoxanthin
2. Lycopene
3. zeaxanthin
4.  $\alpha$ - and  $\beta$ -carotene

**Options :**

9409183067. 1

9409183068. 2

9409183069. 3

9409183070. 4

**Question Number : 43 Question Id : 940918902 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Carotenoids found in retina are\_\_\_\_\_.

1. Lutein and zeaxanthin
2. Lycopene and cryptoxanthin
3.  $\alpha$ -Carotene and  $\beta$ -carotene
4. zeaxanthin and cryptoxanthin

**Options :**

9409183071. 1

9409183072. 2

9409183073. 3

9409183074. 4

**Question Number : 44 Question Id : 940918903 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

\_\_\_\_\_ are rich source of anthocyanin.

- A. Red onion
- B. red cabbage
- C. Cauliflower
- D. Cranberries

Choose the **correct** answer from the options given below:

- 1. A, B and C only
- 2. B, C and D only
- 3. A, C and D only
- 4. A, B and D only

**Options :**

9409183075. 1

9409183076. 2

9409183077. 3

9409183078. 4

**Question Number : 45 Question Id : 940918904 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Lycopene is a lipophilic (lipid soluble) compound hence consuming it with \_\_\_\_\_ increases its bioavailability.

- 1. Fat
- 2. Protein
- 3. Carbohydrate
- 4. Fiber

**Options :**

9409183079. 1

9409183080. 2

9409183081. 3

9409183082. 4

**Question Number : 46 Question Id : 940918905 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**



**Correct Marks : 1 Wrong Marks : 0**

Thermal processing \_\_\_\_\_ lycopene bioavailability by disrupting cellular membranes.

1. increases
2. decreases
3. does not affect
4. none of the options

**Options :**

9409183083. 1

9409183084. 2

9409183085. 3

9409183086. 4

**Question Number : 47 Question Id : 940918906 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

The principal curcuminoid found in turmeric is \_\_\_\_\_ generally considered to be the most active constituent

1. Curcumin
2. Demethoxycurcumin
3. Bisdemethoxycurcumin
4. Capsaicin

**Options :**

9409183087. 1

9409183088. 2

9409183089. 3

9409183090. 4

**Question Number : 48 Question Id : 940918907 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

During an energy imbalance in the body favouring weight loss, the dependence on body \_\_\_\_\_ to sustain its energy needs increases.

1. fat
2. protein
3. glucose
4. muscle

**Options :**

9409183091. 1
9409183092. 2
9409183093. 3
9409183094. 4

**Question Number : 49 Question Id : 940918908 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

\_\_\_\_\_ can be used to increase the activity and bioavailability of Curcumin.

- A. Encapsulation in liposomes
- B. polymeric nanoparticles
- C. cyclodextrin encapsulation
- D. Thermal processing

Choose the **correct** answer from the options given below:

1. A, B and D only
2. A, B and C only
3. B, C and D only
4. A, C and D only

**Options :**

9409183095. 1
9409183096. 2
9409183097. 3
9409183098. 4

**Question Number : 50 Question Id : 940918909 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Patients taking \_\_\_\_\_ should be cautious while taking garlic supplements.

1. Antibiotics
2. Antidepressants
3. Anticoagulants
4. Antipyretics

**Options :**

9409183099. 1

9409183100. 2

9409183101. 3

9409183102. 4

**Question Number : 51 Question Id : 940918910 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Garlic is a rich source of cysteine sulfoxides named as \_\_\_\_\_.

1. propiin
2. alliin
3. isoalliin
4. methiin

**Options :**

9409183103. 1

9409183104. 2

9409183105. 3

9409183106. 4

**Question Number : 52 Question Id : 940918911 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

\_\_\_\_\_ is the main breath metabolite of allicin.

1. Allicin methyl sulfide
2. Allicin diethyl sulfide
3. Allyl methyl sulfide
4. Allyl ethyl sulfide

**Options :**

9409183107. 1

9409183108. 2

9409183109. 3

9409183110. 4

**Question Number : 53 Question Id : 940918912 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Oxalate is an antinutrient that binds to \_\_\_\_\_.

1. sodium
2. potassium
3. iron
4. calcium

**Options :**

9409183111. 1

9409183112. 2

9409183113. 3

9409183114. 4

**Question Number : 54 Question Id : 940918913 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

\_\_\_\_\_ primarily interfere with the digestion of proteins or the absorption and utilization of amino acids.

1. Type A Antinutritional Factors
2. Type B Antinutritional Factors
3. Type C Antinutritional Factors
4. Type D Antinutritional Factors

**Options :**

9409183115. 1

9409183116. 2

9409183117. 3

9409183118. 4

**Question Number : 55 Question Id : 940918914 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

\_\_\_\_\_ is a popular beverage that is a Vitamin B antagonist.

1. Tea
2. Fruit juice
3. Coffee
4. Alcohol

**Options :**

9409183119. 1

9409183120. 2

9409183121. 3

9409183122. 4

**Question Number : 56 Question Id : 940918915 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Phytate acts as an acid chelating Niacin, causing a condition known as \_\_\_\_\_.

1. Beriberi
2. Pellagra
3. Rickets
4. Scurvy

**Options :**

9409183123. 1

9409183124. 2

9409183125. 3

9409183126. 4

**Question Number : 57 Question Id : 940918916 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

In cereals, phytate is located in the \_\_\_\_\_ layer and the germ while the endosperm is almost free of phytate.

1. cotyledons
2. hull
3. aleurone layer
4. bran

**Options :**

9409183127. 1

9409183128. 2

9409183129. 3

9409183130. 4

**Question Number : 58 Question Id : 940918917 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Phytic acid is a known \_\_\_\_\_ which suppresses free radical mediated damage to intestinal epithelium.

1. chelating agent
2. antinutrient
3. antioxidant
4. precipitating agent

**Options :**

9409183131. 1

9409183132. 2

9409183133. 3

9409183134. 4

**Question Number : 59 Question Id : 940918918 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Enzymes are \_\_\_\_\_ , produced by living system, which can act at body temperature and bring about the metabolic reactions.

1. reactants
2. catalysts
3. solvents
4. inhibitors

**Options :**

9409183135. 1

9409183136. 2

9409183137. 3

9409183138. 4

**Question Number : 60 Question Id : 940918919 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Proteases and peptidases split proteins into\_\_\_\_\_.

1. small peptides and amino acids
2. simple sugars
3. fatty acids and glycerol
4. nucleic acids

**Options :**

9409183139. 1

9409183140. 2

9409183141. 3

9409183142. 4

**Question Number : 61 Question Id : 940918920 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Folic acid is a coenzyme involved in \_\_\_\_\_.

1. carbohydrate metabolism
2. protein metabolism
3. energy generation by oxidation
4. haemoglobin synthesis

**Options :**

9409183143. 1

9409183144. 2

9409183145. 3

9409183146. 4

**Question Number : 62 Question Id : 940918921 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**



Protease inhibitors are molecules that block the activity of \_\_\_\_\_.

1. amylases
2. proteases
3. lipases
4. All the options are correct

**Options :**

9409183147. 1

9409183148. 2

9409183149. 3

9409183150. 4

**Question Number : 63 Question Id : 940918922 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

The presence of \_\_\_\_\_ stimulates an increased pancreatic activity, causing pancreatic enlargement followed by pancreatitis.

1. trypsin inhibitors
2. chymase inhibitors
3. elastases inhibitors
4. amylase inhibitors

**Options :**

9409183151. 1

9409183152. 2

9409183153. 3

9409183154. 4

**Question Number : 64 Question Id : 940918923 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

The process of protein degradation, referred to as proteolysis, breaks proteins down into individual \_\_\_\_\_.

1. monosaccharides
2. amino acids
3. fatty acid
4. glycerol

**Options :**

9409183155. 1

9409183156. 2

9409183157. 3

9409183158. 4

**Question Number : 65 Question Id : 940918924 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Which of the following amylolytic enzymes is endoamylase?

1. alpha amylase
2. beta amylase
3. gluco amylase
4. 1-4 beta glucosidase

**Options :**

9409183159. 1

9409183160. 2

9409183161. 3

9409183162. 4

**Question Number : 66 Question Id : 940918925 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Among fruits, \_\_\_\_\_ shows  $\alpha$  amylase inhibitory activity.

1. Apple
2. Custard Apple
3. Pomegranate
4. Banana

**Options :**

9409183163. 1

9409183164. 2

9409183165. 3

9409183166. 4

**Question Number : 67 Question Id : 940918926 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Alpha amylase inhibitors find application in treatment of \_\_\_\_\_.

1. lactose intolerance
2. diabetes mellitus
3. hypertension
4. arthritis

**Options :**

9409183167. 1

9409183168. 2

9409183169. 3

9409183170. 4

**Question Number : 68 Question Id : 940918927 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

The aglycone (glycoside –free) portions of the saponins are termed\_\_\_\_\_.

1. Sapogenin
2. Hemagglutinins
3. Quercetins
4. Allicine

**Options :**

9409183171. 1

9409183172. 2

9409183173. 3

9409183174. 4

**Question Number : 69 Question Id : 940918928 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

The main sources of saponins in human diet are\_\_\_\_\_.

1. Cereals and millets
2. Citrus fruits
3. Milk and milk products
4. Legumes, mainly broad bean, kidney beans and lentils

**Options :**

9409183175. 1

9409183176. 2

9409183177. 3

9409183178. 4

**Question Number : 70 Question Id : 940918929 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Hemagglutinin refers to a substance that causes\_\_\_\_\_ to agglutinate.

1. White blood cells
2. Red blood cells
3. platelets
4. All of the options are correct

**Options :**

9409183179. 1

9409183180. 2

9409183181. 3

9409183182. 4

**Question Number : 71 Question Id : 940918930 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Spices and herbs contain \_\_\_\_\_which can ameliorate conditions due to excessive free radicals in the body.

1. flavour
2. aroma
3. piquancy
4. antioxidants

**Options :**

9409183183. 1

9409183184. 2

9409183185. 3

9409183186. 4

**Question Number : 72 Question Id : 940918931 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

The \_\_\_\_\_ property of curcumin and capsaicin is considered to be due to lowering of cholesterol concentration and enhancing the bile acid concentration.

1. Anti-lithogenic
2. Anti-diabetic
3. Anti-carcinogenic
4. Anti-inflammatory

**Options :**

9409183187. 1

9409183188. 2

9409183189. 3

9409183190. 4

**Question Number : 73 Question Id : 940918932 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

The bioactive components of spices responsible for weight management and satiety are\_\_\_\_\_.

- A. chili pepper
- B. ginger
- C. black pepper
- D. turmeric

1. A, C and D only
2. A, B and C only
3. B, C and D only
4. A, B and D

**Options :**

9409183191. 1

9409183192. 2

9409183193. 3

9409183194. 4

**Question Number : 74 Question Id : 940918933 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

In grapes, resveratrol is found only in the \_\_\_\_\_.

1. skins
2. seeds
3. pulp
4. Skins and pulp

**Options :**

9409183195. 1

9409183196. 2

9409183197. 3

9409183198. 4

**Question Number : 75 Question Id : 940918934 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

The mechanism of action of resveratrol involved in cardio protection is due to \_\_\_\_\_.

- A. arterial vasodilation
- B. stimulation of angiogenesis
- C. inhibition of angiogenesis
- D. inhibiting platelet aggregation

Choose the **correct** answer from the options given below:

1. A, B and D only
2. B, C and D only
3. A, C and D only
4. A, B and C only

**Options :**

9409183199. 1

9409183200. 2

9409183201. 3

9409183202. 4

**Question Number : 76 Question Id : 940918935 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Quercetin serves as a gastroprotective agent by inhibiting \_\_\_\_\_ secretion and lipid peroxidation of gastric cells.

1. Gastric acid
2. Bile
3. Salivary
4. Pancreatic

**Options :**

9409183203. 1

9409183204. 2

9409183205. 3

9409183206. 4

**Question Number : 77 Question Id : 940918936 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Kaempferol has been shown to interact with the \_\_\_\_\_ pathway and alter signaling in order to help slow growth of primary and secondary breast cancer.

1. androgen receptor
2. estrogen receptor
3. insulin receptor
4. carcinogen activating enzymes

**Options :**

9409183207. 1

9409183208. 2

9409183209. 3

9409183210. 4

**Question Number : 78 Question Id : 940918937 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**



The flavor and odour of cinnamon is due to \_\_\_\_\_.

1. cinnamate
2. cinnamic acid
3. cinnamaldehyde
4. cinnamyl alcohol

**Options :**

9409183211. 1

9409183212. 2

9409183213. 3

9409183214. 4

**Question Number : 79 Question Id : 940918938 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

\_\_\_\_\_ is the only saffron metabolite that is capable of crossing the blood-brain barrier.

1. Cis-crocetin
2. Trans-crocetin
3. Cis-crocin
4. Trans-crocin

**Options :**

9409183215. 1

9409183216. 2

9409183217. 3

9409183218. 4

**Question Number : 80 Question Id : 940918939 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Luteolin is an important \_\_\_\_\_, which is naturally found in several plant species.

1. Flavanone
2. Isoflavone
3. Flavone
4. Flavonols

**Options :**

9409183219. 1

9409183220. 2

9409183221. 3

9409183222. 4

**Question Number : 81 Question Id : 940918940 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Piperine is an \_\_\_\_\_ responsible for the pungency of black pepper.

1. flavonoid
2. alkaloid
3. carotenoid
4. curcumenoid

**Options :**

9409183223. 1

9409183224. 2

9409183225. 3

9409183226. 4

**Question Number : 82 Question Id : 940918941 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Piperine enhances the extent of absorption and bioavailability of \_\_\_\_\_.

1. gingerol
2. curcumin
3. luteolin
4. diosgenin

**Options :**

9409183227. 1

9409183228. 2

9409183229. 3

9409183230. 4

**Question Number : 83 Question Id : 940918942 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

The consumption of foods containing capsaicin is associated with a lower prevalence of obesity due to \_\_\_\_\_.

- A. enhanced lipid oxidation
- B. increased energy expenditure
- C. storing extra energy as fat
- D. stimulating hunger to eat more

Choose the **correct** answer from the options given below:

1. A and D only
2. A and C only
3. B and C only
4. A and B only

**Options :**

9409183231. 1

9409183232. 2

9409183233. 3

9409183234. 4

**Question Number : 84 Question Id : 940918943 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Gingerol could be effective in diabetes by\_\_\_\_\_.

1. inhibiting the production of advanced glycation end products
2. increasing HbA1C
3. increasing postprandial sugar
4. increasing fasting sugar

**Options :**

9409183235. 1

9409183236. 2

9409183237. 3

9409183238. 4

**Question Number : 85 Question Id : 940918944 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Clove buds, cinnamon bark and leaves and tulsi leaves are the sources of \_\_\_\_\_.

1. crocin
2. eugenol
3. cinnamaldehyde
4. capsaicine

**Options :**

9409183239. 1

9409183240. 2

9409183241. 3

9409183242. 4

**Question Number : 86 Question Id : 940918945 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

\_\_\_\_\_ is a good source of Apigenin.

1. onions
2. celery
3. chamomile
4. parsley

**Options :**

9409183243. 1

9409183244. 2

9409183245. 3

9409183246. 4

**Question Number : 87 Question Id : 940918946 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

The \_\_\_\_\_ of rosemary plant are a source of Rosemerinic Acid.

1. flowers
2. roots
3. leaves
4. buds

**Options :**

9409183247. 1

9409183248. 2

9409183249. 3

9409183250. 4

**Question Number : 88 Question Id : 940918947 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Fenugreek seeds contain a number of bioactive compounds among which \_\_\_\_\_ represents the principal steroidal saponin.

1. trigonalline
2. diosgenin
3. gentianine
4. carpaine

**Options :**

9409183251. 1

9409183252. 2

9409183253. 3

9409183254. 4

**Question Number : 89 Question Id : 940918948 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Diosgenin has been shown to suppress inflammation and proliferation and induce \_\_\_\_\_ in cancer cells.

1. inhibitory effects
2. apoptosis
3. necrosis
4. hypoglycaemic effect

**Options :**

9409183255. 1

9409183256. 2

9409183257. 3

9409183258. 4

**Question Number : 90 Question Id : 940918949 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Omega-3 fatty acid is the precursor of eicosapentaenoic acid and \_\_\_\_\_.

1. linoleic acid
2. docosahexaenoic acid
3. arachidonic acid
4. docosapentaenoic acid

**Options :**

9409183259. 1

9409183260. 2

9409183261. 3

9409183262. 4

**Question Number : 91 Question Id : 940918950 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Vegetarian rich sources of alpha-linoleic acid are \_\_\_\_\_ and walnuts.

1. sesame seeds
2. coconut
3. chia seeds
4. mustard seeds

**Options :**

9409183263. 1

9409183264. 2

9409183265. 3

9409183266. 4

**Question Number : 92 Question Id : 940918951 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Omega-3 fatty acid increases fibrinolysis, aids in vasodilation and increases serum \_\_\_\_\_.

1. triglyceride
2. VLDL
3. HDL
4. LDL

**Options :**

9409183267. 1

9409183268. 2

9409183269. 3

9409183270. 4

**Question Number : 93 Question Id : 940918952 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

\_\_\_\_\_ may represent particularly good sources of Conjugated linoleic acid.

1. Fresh vegetables
2. Eggs
3. Fermented dairy products
4. Cereals

**Options :**

9409183271. 1

9409183272. 2

9409183273. 3

9409183274. 4

**Question Number : 94 Question Id : 940918953 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**



Conjugated linoleic acid supplementation is known to reduce \_\_\_\_\_.

1. body fat
2. body proteins
3. basal metabolic rate
4. all of the options are correct

**Options :**

9409183275. 1

9409183276. 2

9409183277. 3

9409183278. 4

**Question Number : 95 Question Id : 940918954 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

\_\_\_\_\_ metabolism is related to calcium, phosphorus, vitamin K and iron.

1. Vitamin A
2. Vitamin C
3. Vitamin E
4. Vitamin D

**Options :**

9409183279. 1

9409183280. 2

9409183281. 3

9409183282. 4

**Question Number : 96 Question Id : 940918955 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Vitamin B6 is one of the B vitamins involved in producing the neurotransmitters serotonin and

\_\_\_\_\_.

1. norepinephrine
2. epinephrine
3. thyroxin
4. calcitonin

**Options :**

9409183283. 1

9409183284. 2

9409183285. 3

9409183286. 4

**Question Number : 97 Question Id : 940918956 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Children chronically exposed to \_\_\_\_\_ even in small amounts, are more likely to develop learning disabilities and have low IQs.

1. lead
2. calcium
3. phosphorus
4. magnesium

**Options :**

9409183287. 1

9409183288. 2

9409183289. 3

9409183290. 4

**Question Number : 98 Question Id : 940918957 Question Type : MCQ Option Shuffling : No Is**

**Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

Magnesium might lower blood pressure by acting as a \_\_\_\_\_ antagonist on smooth muscle tone.

1. Potassium
2. Phosphorus
3. Calcium
4. Sodium

**Options :**

9409183291. 1
9409183292. 2
9409183293. 3
9409183294. 4

**Question Number : 99 Question Id : 940918958 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

\_\_\_\_\_ can exert health beneficial properties and are considered as a lead component for development of nutraceuticals or functional foods.

1. Protein
2. Fatty acids
3. Bioactive peptides
4. Amino acids

**Options :**

9409183295. 1
9409183296. 2
9409183297. 3
9409183298. 4

**Question Number : 100 Question Id : 940918959 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No**

**Correct Marks : 1 Wrong Marks : 0**

\_\_\_\_\_ increase colonic blood flow, lower luminal pH and help prevent the development of abnormal colonic cell population.

1. Peptide
2. Bacteroides
3. Short chain fatty acids
4. Glycoprotein

**Options :**

9409183299. 1

9409183300. 2

9409183301. 3

9409183302. 4