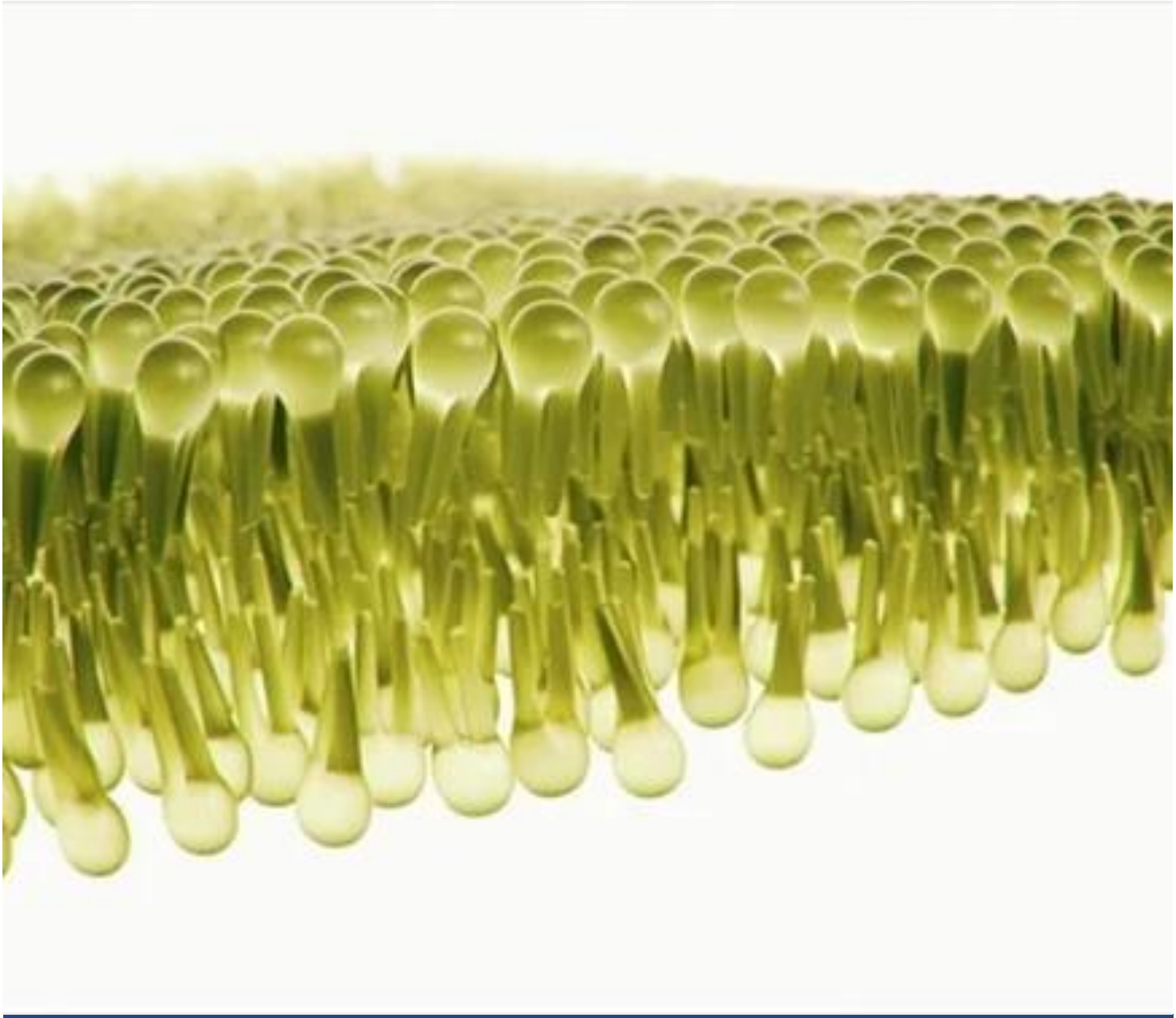

Lipids MCQ

Vikas Bhardwaj

Biochemistry

Introduction

Welcome to **Lipids MCQ**, a comprehensive question bank designed to enhance your understanding of Biochemistry. This ebook contains over 500 multiple-choice questions (MCQs) covering a wide array of topics within the field of Lipids and its metabolism.

Whether you're a medical student preparing for exams, a postgraduate aspirant aiming for success in competitive entrance tests, or a healthcare professional looking to refine your expertise, this book will serve as an invaluable resource in your learning journey. The questions in this ebook are structured to reflect the patterns seen in major medical entrance exams such as NEET PG, USMLE, AIIMS, and others, making it a perfect tool for self-assessment and revision.

Purpose

The primary goal of this ebook is to provide a reliable and extensive resource that students and professionals can use to test their knowledge, improve their diagnostic skills, and solidify key microbiological concepts. With the included detailed answers and explanations, this book goes beyond just helping you answer questions — it enables you to understand the reasoning behind each answer, facilitating deeper learning.

How This Ebook Can Help You

- **For Students**: The MCQs in this book are designed to match the rigor and format of real exam questions. By practicing regularly, you'll not only enhance your knowledge but also gain confidence in approaching exam challenges.
- **For Professionals**: This ebook helps professionals stay updated with the latest developments in carbohydrates in medical science and refresh critical concepts required in day-to-day practice.
- **For Educators**: Teachers and educators can use this collection to formulate quizzes, exams, or as supplementary teaching material for their students.

Compilation and Sources

This ebook is a compilation of publicly available online content. Each question has been carefully selected and curated to ensure relevance and accuracy. While this material is sourced from multiple platforms, it has been reorganized and edited to provide a streamlined learning experience.

We hope this book becomes an essential part of your academic and professional toolkit, helping you achieve your goals in Biochemistry.

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Questions

1-: In chronic alcoholism the rate limiting component for alcohol metabolism excluding enzymes is/are:

1: NADP

2: NAD+

3: NADPH

4: FADH

2-: In a patient with a type of familial dyslipidemias he presented with palmar Xanthomas and he ias at increased risk of atherosclerosis and CAD.In Lipid profile there was elevation of triacylglycerols and cholesterol.And the IDL and chylomicrons were elevated.What is the pathophysiology of the condition?

1: LDL deficiency

2: VLDL overproduction

3: Apo C-2 deficiency

4: Apo E deficiency

3-: Acyl carnitine functions in:

1: Transport of long chain fatty acid

2: Transport of short chain fatty acid

3: Transport of NADH

4: Transport of FADH

4-: Which of the following is not a part of fatty acid synthase Complex?

1: Ketoacyl reductase

2: Enoyl reductase

3: Acetyl-CoA carboxylase

4: Ketoacyl synthase

5-: Fatty acid synthase complex contain the following enzymes except:

1: Enoyl reductase

2: Ketoacyl reductase

3: Acetyl: CoA carboxylase

4: Dehydratase

6-: Highest cholesterol content is seen in -

1: LDL

2: VLDL

3: Chylomicrons

4: IDL

7-: To be defined as a ganglioside,a lipid substance isolated from nervous tissue must contain

1: NANA,hexose,fatty acid,glycerol

2: NANA,hexose,fatty acid,phosphorycholine

3: NANA,sphingosine,ethanolamine

4: NANA,hexose,sphingosine,long chain fatty acid,

8-: All are true about ketone bodies except

1: Acetoacetate is primary ketone body

2: Synthesized in mitochondria

3: Synthesized in liver

4: HMG CoA reductase is the rate-limiting enzyme

9-: Role of carnitine in lipid metabolism -

1: Catalyzation of the cyclization sequence

2: Essential for extracellular transfer of fatty acids

3: Essential for biosynthesis of fatty acids

4: Transfer of activated long chain FFA into mitochondria

10-: A person switches from high fat diet to low fat diet with compensatory increase in carbohydrates to maintain the same calories. Which of the following fat component will be increased ?

1: Chylomicron

2: VLDL

3: IDL

4: HDL

11-: Which enzyme is a enzyme regulatory step in cholesterol synthesis?

1: HMG CoA synthase

2: HMG CoA reductase

3: Phosphomevalonate kinase

4: Diphosphomevalonokinase

12-: Main LDL receptors is:

1: APO-A

2: APO-B-100

3: APOc-100

4: APO-100 & APO-E

13-: Atherosclerosis is due to

1: HDL receptor defect

2: Apo protein E deficiency

3: Decreased LDL activity

4: Decreased lipoprotein lipase

14-: Unsaturated fatty acids are converted to:

1: Prostaglandins

2: Cholesterol

3: Cell membrane lipid

4: Saturated fatty acid

15-: The source of apo-E and apo C-II for the chylomicrons is:

1: VLDL

2: IDL

3: LDL

4: HDL

16-: Cholesterol is a(an)

1: Ester

2: Phospholipid

3: Sterol

4: Lipoprotein

17-: All of the following are true about Cholesterol Ester Transfer Protein(CETP) , EXCEPT:

1: Associated with HDL

2: Facilitates the transfer of cholesterol ester from HDL to LDL

3: Facilitates the transfer of triacylglycerol from LDL to HDL

4: Facilitates the transfer of triacylglycerol from HDL to LDL

18-: Eicosanoids are derived from

1: Oleoc acid

2: Linoleic acid

3: Linolenic acid

4: Archidonic acid

19-: Concentration of which is inversely related to the risk of coronary hea disease

1: VLDL

2: LDL

3: HDL

4: None

20-: Triglycerides are maximum in

1: Chylomicrons

2: VLDL

3: LDL

4: HDL

21-: Which organs do not utilise ketone bodies?

1: Skeletal muscles

2: Cardiac muscles

3: Liver

4: RBC

22-: Which steroid is formed from cholesterol without hydroxylation -

1: Progesterone

2: Glucocoicoid

3: Mineralocoicoid

4: Estradiol

23-: A man has just received his fourth DUI citation. The judge orders an alcohol dependency program complete with a medication that makes him have nausea and vomiting if he drinks alcohol while taking the medication. The drug-induced illness is caused by the buildup of which one of the following?

1: Ethanol

2: Acetaldehyde

3: Acetate

4: Acetyl-CoA

24-: The Lipid which accumulates in fatty liver is

1: Trigylcerids

2: FFA

3: Lipoprotein

4: Cholesterol

25-: The storage triacylglycerol are hydrolysed by:

1: Pancreatic lipase

2: Lipoprotein lipase

3: Lysosomal lipase

4: Hormone sensitive lipase

26-: Apolipoprotein activating L-CAT (LQ) is

1: B - 48

2: A - I

3: A - II

4: B-100

27-: An individual has been determined to have hypertriglyceridemia, with a triglyceride level of 350 mg/dL (normal is <150 mg/dL). The patient decides to reduce this level by keeping his caloric intake the same, but switching to a low-fat, low-protein, high-carbohydrate diet. Three months later, after sticking faithfully to his diet, his triglyceride level was 375 mg/dL. This increase in lipid content is being caused by which component of his new diet?

1: Phospholipids

2: Triglycerides

3: Amino acids

4: Carbohydrates

28-: Which of the following contains highest protein content?

1: Triglycerides

2: HDL

3: LDL

4: VLDL

29-: Products of complete hydrolysis of cardiolipin are:

1: 3 glycerol, 4 fatty acids , 2 phosphates

2: 3 glycerol, 4 fatty acids , 1 phosphates

3: 3 glycerol, 3 fatty acids , 2 phosphates

4: 5 glycerol, 4 fatty acids , 2 phosphates

30-: The first step in fatty acid synthesis involves:

1: Acetyl-CoA carboxylase

2: Hydroxyl-CoA dehydrogenase

3: Acetyl dehydrogenase

4: Pyruvate kinase

31-: Alcohol is found in all except :

1: Glucocerebroside

2: DHA (Docosa Hexaenoic Acid)

3: Lecithin

4: Sphingomyelin

32-: Which of the following types of hyperiglyceridemia is associated with an increase in chylomicron and VLDL remnants?

1: Type I

2: Type IIa

3: Type III

4: Type IV

33-: Which of the following is not a step of b-oxidation?

1: NADP dependent oxidation

2: FAD dependent oxidation

3: Thiolysis

4: Hydration

34-: Regarding synthesis of triacylglycerol in adipose tissue, all of the following are true except

1: Synthesis from Dihydroxyacetone phosphate

2: Enzyme Glycerol Kinase plays an impoant role

3: Enzyme Glycerol 3 phosphate dehydrogenase plays an impoant role

4: Phosphatidate is hydrolyzed

35-: The following substance acts as a 'satiety signal' for lipids

1: Apo-A

2: HCL

3: Fastrine

4: Enterostatin

36-: The dietary fats are transmitted from GIT to adipocytes in the form of

1: Diacyl glycerol

2: Triacylglycerol

3: Fat misseles

4: Chylomicrons

37-: Primary ketone body

1: b-hydroxybutyrate

2: Acetoacetate

3: Acetone

4: None

38-: Ketone body formation takes place in:

1: Liver

2: Kidney

3: Spleen

4: Blood

39-: In Coronary aery disease the cholesterol level (mg/dl) recommended is:

1: Below 200

2: < 220

3: < 250

4: < 280

40-: Which of the following phospholipid is predominantly found in the inner mitochondrial membrane?

1: Cardiolipin

2: Cephalin

3: Lecithin

4: Sphingomyelin

41-: Lipoprotein involved in reverse cholesterol transport-

1: LDL

2: VLDL

3: CETP

4: HDL

42-: Enzyme deficiency seen in genetic diseases like

1: Tay sach's disease

2: Sickle cell anemia

3: Cystic Fibrosis

4: Wilson's disease

43-: HDL was called good cholesterol because:

1: Activates lipoprotein lipase

2: Stimulate hepatic TGs synthesis

3: Causes transpo from extrahepatic tissues

4: Removes cholesterol from extrahepatic tissues

44-: What is the parameter that is used to assess lipid peroxidation?

1: Malondialdehyde

2: CRP

3: hsCRP

4: Carboxymethyl lysine

45-: Lipid with highest mobility is -

1: HDL

2: LDL

3: VLDL

4: Chylomicrons

46-: Ketoacidosis without glycosuria is seen in

1: Aspirin poisoning

2: Rena tubular

3: Prolonged starvation

4: Paracetamol poising

47-: The structure of Phospholipid consists of

1: Monoglyceride+phosphate+choline

2: Diglyceride+phosphate+choline

3: Triglyceride+phosphate+choline

4: Glycerol+phosphate+choline

48-: LCAT is involved in

1: Transpo of dictory cholesterol

2: Transpo of dietory TGs

3: Reverse cholesterol transpo

4: None

49-: A defect in the enzyme hexosaminidase causes

1: Gaucher disease

2: Farber disease

3: Tay-Sachs disease

4: Krabbe disease

50-: The fold in collagen is because of presence of:

1: Histidine

2: Glycine

3: Argininc

4: Glutamate

51-: A person on fat free, carbohydrate-rich diet, continues to grow obese. Which lipoprotein is increased in this person's blood:

1: LDL

2: HDL

3: VLDL

4: Chylomicrons

52-: Type II hypercholesterolemia is due to

1: Defect in scavaging function of HDL

2: Defect in LDL receptor

3: Defect in ABCA protein

4: Defect in all above

53-: Cerebrosides contain which of the following?

1: Phytol

2: Glycerol

3: Galactitol

4: Sphinogosine

54-: LCAT activates

1: Apo A1

2: Apo B100

3: Apo C-2

4: Apo C-3

55-: One of the following is obtained in the by beta oxidation of odd chain fatty acids:

1: Acetyl-CoA + Acetyl-CoA

2: Acetyl-CoA + Propionyl-CoA

3: Propionyl CoA + Propionyl-CoA

4: Acetyl-CoA alone

56-: Lipid with highest mobility is

1: HDL

2: LDL

3: VLDL

4: Chylomicrons

57-: Major metabolism of saturated fatty acids in the mitochondria is called as -

1: b-oxidation

2: a-oxidation

3: o-oxidation

4: None of the above

58-: Activator of acetyl CoA carboxylase is

1: Malonyl CoA

2: Acetoacetate

3: Citrate

4: Palmitoyl CoA

59-: Which of the following is a byproduct of hydrogenation of vegetable oils?

1: Cis fatty acids

2: Trans fatty acids

3: Eicosanoids

4: Glycerol

60-: LCAT activates?

1: ApoA1

2: ApoB100

3: Apo C-2

4: Apo C-3

61-: Ketone bodies are formed in the

1: Liver

2: Pancrease

3: Kidneys

4: Lungs

62-: The most common lysosomal storage disorder is

1: Gaucher's disease

2: Taysach's disease

3: Wolman disease

4: Niemann pick's disease

63-: GLUT 5 receptors present in

1: Brain

2: Placenta

3: Small Intestine

4: Skeletal muscle

64-: Which of the following is a phytosterol?

1: Sitosterol

2: Cholesterol

3: Ergosterol

4: Calcitriol

65-: Ketone body formation without glycosuria seen in -

1: DM

2: DI

3: Prolonged starvation

4: Obesity'

66-: Bile acids are synthesized from:

1: Arachidonic acid

2: Linoleic acid

3: Linolenic acid

4: Acetyl CoA

67-: All of the following are associated with increased risk of atherosclerotic plaque formation except

1: Apo E mutation

2: Oxidized LDL

3: Increased homocysteine

4: Increased Alpha 2 macroglobulin

68-: Cholesterol is not a precursor for synthesis of:

1: Vitamin D

2: Bile acids

3: Lipocoin

4: Progesterone

69-: Energy storage form in liver -

1: Triglyceride

2: Cholesterol

3: FFA

4: Glycogen

70-: Fatty acid synthase complex result in formation of

1: 14 carbon chain

2: 16 carbon chain

3: 18 carbon chain

4: 20 carbon chain

71-: Medium chain fatty acids

1: Require pancreatic lipase for digestion

2: Absorbed through lymphatics

3: Also digested in stomach

4: Require bile salts for absorption and digestion

72-: Ketone body production occurs in?

1: Cytoplasm

2: Mitochondria

3: Golgi body

4: Nucleus

73-: In beta oxidation of fatty acids carnitine is required for -

1: Conversion ofshort chain fatty acids to long chain fatty acids

2: Transport of long chain fatty acid to mitochondrial inner layer

3: Transport of long chain fatty acid to cytoplasm

4: Conversion of long chain fatty acids to short chain fatty acids

74-: Which is an omega-9 fatty acid?

1: Arachidonic acid

2: Oleic acid

3: Linolenic acid

4: Cervonic acid

75-: Which of the following is not a component of fatty acid synthase complex:

1: Enoyl reductase

2: Acetyl transacylase

3: Acetyl-CoA carboxylase

4: Ketoacyl synthase

76-: Products of Phospholipase C are -

1: Inositol and diacylglycerol

2: Inositol triphosphate and Diacylglycerol

3: Lysophospholipid and fattyacid

4: Phosphatidate and IP2

77-: The first lipoprotein to increase in concentration in the blood after ingestion of 400 g of jellybeans (carbohydrate) is

1: Chylomicrons

2: VLDL

3: LDL

4: HDL

78-: Statement true about ketone bodies is

1: Major source of energy supply to liver

2: They are derived from cholesterol

3: Their levels increase in starvation

4: Levels are raised in fed state

79-: Which cholesterol is designated as "Good Cholesterol" -

1: VLDL

2: LDL

3: HDL

4: IDL

80-: Which is an abnormal lipoprotein?

1: Lipoprotein-X

2: Lipoprotein(a)

3: IDL

4: LDL

81-: Phospholipid is -

1: Leukotrienes

2: Lecithin

3: Cerebroside

4: Ganglioside

82-: LDL level in non diabetics should be below what value in mg/dl:

1: 50

2: 75

3: 100

4: 130

83-: Which of the following has maximum cholesterol content:

1: HDL

2: LDL

3: VLDL

4: Chylomicrons

84-: Beta oxidation of fatty acids occur in

1: Nucleus

2: Mitochondria

3: Cytoplasm

4: Peroxisomes

85-: Familial hypercholesterolemia is due to defect in

1: Apo A

2: Lipoprotein lipase

3: Apo C

4: Apo B 100

86-: LCAT deficiency increases the following

1: Chylomicrons

2: IDL

3: VLDL

4: HDL

87-: Snake venom contains which of the following enzyme:

1: Phospholipase A1

2: Phospholipase A2

3: Phospholipase C

4: Phospholipase D

88-: Ligand for LDL

1: APO B 100

2: APO E

3: APO 48

4: APO A11

89-: Glycine can be synthesized by all except:

1: Glyoxalate

2: Leucine

3: Serine

4: Threonine

90-: Increased level of lipoprotein (a)predisposes to:

1: Liver cirrhosis

2: Atherosclerosis

3: Nephritic syndrome

4: Pancreatitis

91-: Main lipid component of chylomicrons is

1: Triacylglycerols

2: Phospholipids

3: Cholesterol

4: Free fatty acids

92-: Familial hypercholesterolemia is characterized by-

1: Increased LDL

2: Decreased lipoprotein lipase

3: Increased VLDL

4: All of the above

93-: Which has highest choclestrol content?

1: HDL

2: LDL

3: VLDL

4: Chylomicron

94-: Fatty liver may be caused by:

1: Deficiency of methionine

2: Puromycin

3: Chronic alcoholism

4: All of these

95-: Rate limiting enzyme in cholesterol synthesis

1: HMG CoA synthetase

2: HMG CoA lyase

3: HMG CoA reductase

4: Mevalonate synthetase

96-: Type 2 hypercholesterolemia occurs due to

1: Lipoprotein lipase deficiency

2: Absence of LDL receptors on cells

3: Abnormality in apo E

4: LCAT deficiency

97-: Site of b-oxidation is -

1: Cytosol

2: Mitochondria

3: Lysosome

4: Golgi apparatus

98-: Ketone bodies are used by all except -

1: Brain

2: Heart muscles

3: Skeletal muscles

4: Hepatocytes

99-: Maximum content of triglycerides are found in

1: HDL

2: LDL

3: Chylomicrons

4: VLDL

100-: A deficiency of pancreatic exocrine secretion can result in which one of the following?

1: An increased pH in the intestinal lumen

2: An increased absorption of fat-soluble vitamins

3: A decreased formation of bile salt micelles

4: Increased levels of blood chylomicrons

101-: Type 2 hypercholesterolemia occurs due to -

1: Lipoprotein lipase deficiency

2: Absence of LDL receptors on cells

3: Abnormality in apo E

4: LCAT deficiency

102-: All of the following statements about LDL are true except

1: It delivers cholesterol to cells

2: It contains only one Apoprotein

3: It is a marker for cardiovascular disease

4: It contains Apo-B4

103-: All the following about the fatty acid diagram are true except:

1: Used in the treatment of type I hyperlipoproteinemia

2: Decrease triacyl glycerol level

3: Decrease HDL cholesterol

4: Lower the inflammatory risk

104-: Phospholipid is

1: Leukotrienes

2: Lecithin

3: Cerebroside

4: Ganglioside

105-: Chylomicrons contain

1: Apo A

2: Apo B

3: Apo C

4: Apo E

106-: All are true about LDL except -

1: More dense than chylomicron

2: Smaller than VLDL

3: Transports maximum amount of lipid

4: Contains maximum cholesterol

107-: Zellweger syndrome is due to defect in-

1: Fatty acid synthesis in cytosol

2: Fatty acid oxidation in peroxisomes

3: Fatty acid oxidation in mitochondria

4: Fatty acid oxidation in smooth ER

108-: Type-I hyperlipoproteinemia is characterized by

1: Elevated LDL

2: Elevated HDL

3: Elevated chylomicrons

4: Elevated lipoprotein lipase

109-: Which one of the following sequences places the lipoproteins in the order of most dense to least dense?

1: HDL/VLDL/chylomicrons/LDL

2: HDL/LDL/VLDL/chylomicrons

3: LDL/chylomicrons/HDL/VLDL

4: VLDL/chylomicrons/LDL/HDL

110-: Hormone sensitive lipase is inhibited by?

1: Insulin

2: Glucagon

3: ACTH

4: Catecholamines

111-: Which is an omega - 9 fatty acid:

1: Cervonic acid

2: Oleic acid

3: Linolenic acid

4: Arachidonic acid

112-: A 52-year-old man, after suffering a heart attack, was put on 81 mg of aspirin daily by his cardiologist. The purpose of this treatment is to reduce the levels of which one of the following?

1: Cytokines

2: Leukotrienes

3: Thromboxanes

4: Cholesterol

113-: All of the following are involved in the reverse cholesterol transpo, except:

1: ABCA1

2: ABCG1

3: LCAT

4: Lipoprotein lipase

114-: Which 2 additional enzymes required in Beta Oxidation of PUFA?

1: Dienoyl CoA isomerase and Enoyl CoA reductase

2: Dienoyl CoA isomerase and Dienoyl CoA reductase

3: Enoyl CoA racemase and Enoyl CoA reductase

4: Enoyl CoA isomerase and 2,4 Dienoyl CoA reductase

115-: Apolipoprotein of chylomicron is:

1: Apo B100

2: Apo B48

3: Apo E

4: Apo AI

116-: Lipoprotein associated with carrying cholesterol from periphery tissues to liver is -

1: HDL '

2: LDL

3: VLDL

4: IDL

117-: All are true about fatty acid synthesis except

1: Requires NADPH

2: Requires NADH

3: Occurs in cytosol

4: Intermediately linked with glycolysis

118-: Role of bile salts -

1: Vit B12 absorption

2: Formation of lipid bilaver

3: Emulsification of lipids

4: Fatty acid degradation

119-: Brain cannot utilize -

1: Glucose

2: Fatty acids

3: Ketone bodies

4: None

120-: Fatty acid sythase complex does not include

1: Acyl transacetylase

2: Enoyl reductase

3: Keto acyl synthase

4: Acetyl co A carboxylase

121-: Peroxisomal disorder is-

1: Zellweger Syndrome

2: MEALS

3: LHON

4: MERRF

122-: Which of the following is a polyunsaturated fatty acid?

1: Palmitic acid

2: Stearic acid

3: Oleic acid

4: Linoleic acid

123-: type 2 hypercholesterolemia occubrs due to

1: Lipoprotein lipase deficiency

2: Absence of LDL receptors on cells

3: Abnormality in apo E

4: LCAT deficiency

124-: Inheritance of Familial Hypercholesterolemia is?

1: Autosomal dominant

2: Autosomal recessive

3: X Linked dominant

4: X Linked recessive

125-: Which receptors are present in liver for uptake of LDL?

1: Apo E

2: Apo A and Apo E

3: Apo E and Apo B100

4: Apo B 100

126-: Cholesterol is a predominant lipid in

1: LDL and HDL

2: HDL and VLDL

3: Chylomicron and VLDL

4: IDL and HDL

127-: Maximum cholesterol is seen in -

1: VLDL

2: LDL

3: HDL

4: Chylomicrons

128-: Respiratory distress syndrome in premature infants is due to inadequate secretion of which one of the following lipids?

1: Dipalmitoyl phosphatidycholine

2: Sphingomyelin

3: Cholesterol

4: Phosphatidylinositol

129-: Transport of the cholesterol from peripheral tissue to liver is through

1: HDL

2: LDL

3: VLDL

4: Chylomicrons

130-: The APO-B100 and APO-B48 are different lipoproteins due to

1: DNA duplication

2: RNA splicing

3: RNA editing

4: Misreading of m-RNA

131-: Which of the following is produced by the complete oxidation one molecule of palmitic acid in mitochondrial beta oxidation?

1: 8 FADH2, 8 NADH and 8 acetyl CoA molecules

2: 7 FADH2, 7 NADH and 7 acetyl CoA molecules

3: 8 FADH2, 8 NADH and 7 acetyl CoA molecules

4: 7 FADH2, 7 NADH and 8 acetyl CoA molecules

132-: Apoproteins present in LDL

1: B-48

2: B-100

3: C-I

4: C-III

133-: Lipoprotein (a) resembles:

1: Plasmin

2: Plasminogen

3: Thrombin

4: Prothrombin

134-: Accumulation of sphingomyelin in phagocytic cells is feature of

1: Gauchers disease

2: Niemann pick ds

3: Tay sachs disease

4: Downs syndrome

135-: A patient with a history of recurring attacks of pancreatitis, eruptive xanthomas, and increased plasma triglyceride levels (2,000 mg/dL). Which of the following is the most likely deficiency:

1: Lipoprotein Lipase

2: LDL receptors

3: HMG-CoA reductase

4: ABCA1 receptor

136-: Dietary triglycerides are transported by

1: Chylomicrons

2: VLDL

3: LDL

4: HDL

137-: Krabbes disease is due to deficiency of -

1: Sphingomyelinase

2: Beta galactocerebrosidase

3: Hexosaminidase

4: Aryisulfatase

138-: Sphingomyelinase deficiency is seen in:

1: Niemann - Pick disease

2: Fabry's disease

3: Tay Sach's disease

4: Krabbe's disease

139-: Bile acids consist of all EXCEPT:

1: Lithocholic acid

2: Taurocholic aci

3: Deoxycholic acid

4: Chendeoxycholic acid

140-: Accumulation of the following causes fatty liver

1: Cholesterol

2: Triglycerides

3: Cholesterol ester

4: Phospholipids

141-: Rate limiting step in cholesterol synthesis is

1: HMG CoA synthetase

2: HMG CoA reductase

3: Thiokinase

4: Mevalonate kinase

142-: Carnitine required for which process in fatty acid cycle?

1: Fatty acid synthesis

2: Fatty acid oxidation

3: Fatty acid storage

4: Ketone body synthesis

143-: End point of fatty acid synthesis is formation of -

1: Palmitic acid

2: Stearic acid

3: Oleic acid

4: Linoleic acid

144-: The major fuel in the brain after several weeks of starvation is:

1: Glucose

2: Fatty acid

3: b-Hydroxybutyrate

4: Glycerol

145-: Which of the following is not a component of fatty acid synthase complex?

1: Enoyl reductase

2: Acetyl transacylase

3: Acetyl-CoA carboxylase

4: Ketoacyl synthase

146-: What will you give to stop chyturia in diet?

1: Small chain FA

2: Medium chain FA

3: Long chain FA

4: Omega 3 unsaturated FA

147-: Beta oxidation of odd chain fatty acid produces acetyl CoA and _____?

1: Malonyl CoA

2: Succinyl CoA

3: Propionyl CoA

4: Methylmanoyl CoA

148-: Which of the following is NOT true regarding the structure given below?

1: Phosphatidic Acid + Choline

2: Deficiency can cause respiratory distress in newborn

3: It is a sphingophospholipid

4: Largest body store of Choline

149-: Which among the following is not a saturated fatty acid?

1: Myristic acid

2: Stearic acid

3: Palmitic acid

4: Linoleic acid

150-: Essential fatty acids are helpful in controlling which of the following?

1: Atherosclerosis

2: Nephritis

3: Diabetes Mellitus

4: Oedema

151-: Which is cardio protective?

1: HDL

2: LDL

3: IDL

4: VLDL

152-: Most important essential fatty acid?

1: Linoleic acid

2: g Linolenic acid

3: Arachidonic acid

4: Cervonic acid

153-: Lipotropic factors are

1: Choline

2: Betain

3: Methionine

4: Tryptophan

154-: To be defined as a ganglioside, a lipid substance isolated from nervous tissue must contain in its structure

1: N-Acetylneuraminic acid (NANA), hexoses, sphingosine, long chain fatty acid

2: NANA, a hexoses, a fatty acid, sphingosine, phosphorylcholine

3: NANA, Phingosine, ethanolamine

4: NANA, hexoses, fatty acid, glycerol

155-: Abetalipoproteinemia is due to deficiency of -

1: Lecithin Cholesterol Acyl Transferase

2: ATP Binding Cassette Transporter-1

3: Mitochondrial Triglyceride Transfer Protein

4: ApoCII

156-: A patient was found to have high LDL, increased total cholesterol. But normal levels of LDL-Receptors. What is the most probable cause:

1: Apo B100 mutation

2: Apo E defect

3: LCAT Deficiency

4: Lipoprotein lipase Deficiency

157-: Essential fatty acid

1: Linoleic acid

2: Palmitoleic acid

3: Oleic acid

4: Arachidonic acid

158-: Pancreatic secretions are a rich source of

1: Phospholipase A1

2: Phospholipase A2

3: Phospholipase C

4: Phospholipase D

159-: The site of reactions for the synthesis of creatinine follows the sequence:

1: Liver, Kidney, Muscle

2: Kidney, Liver, Muscle

3: Muscle, Kidney, Liver

4: Muscle, Liver, Kidney

160-: Major apolipoprotein of chylomicrons -

1: B-100

2: D

3: B-48

4: None

161-: In well fed state, the activity of Carnitine Palmitoyl Transferase-1 in outer mitochondrial membrane is inhibited by:

1: Glucose

2: Acetyl-CoA

3: Malonyl-CoA

4: Pyruvate

162-: The immediate precursor in the formation of acetoacetate from acetyl-CoA in the liver is:

1: Mevalonate

2: HMG-CoA

3: Acetoacetyl-CoA

4: 3-hydroxyl-butyryl-CoA

163-: Major end product of beta oxidation of odd chain fatty acids:

1: Propionyl CoA

2: Succinyl CoA

3: Acetyl CoA

4: Malonyl CoA

164-: All of the following statements about fatty acid synthesis are true, except:

1: Occurs in cytosol

2: Citrate shuttle is required

3: Acetyl CoA is the immediate substrate

4: Palmitoleic acid is the end product

165-: Which enzyme defect causes Tay Sach's disease?

1: b glucosidase

2: a galactosidase

3: Hexosaminidase A

4: B galactosidase

166-: The most impoant source of reducing equivalents for fatty acid synthesis in the liver is

1: Glycolysis

2: TCA cycle

3: Uronic acid pathway

4: HMP pathway

167-: True about bile acids is

1: 7 a hydroxylase is the rate limiting enzyme in the synthesis

2: They are derived from cholesterol

3: Cholic acid is primary bile acid

4: All of the above

168-: Sphingomyelinase deficiency is seen in

1: Niemann - Pick disease

2: Farber's disease

3: Tay Sach's disease

4: Krabbe's disease

169-: The enzyme involved in the activation for fatty acids beta oxidation is?

1: Thiophorase

2: Thiokinase

3: Thiolase

4: Thioesterase

170-: Apoprotein C

1: Activates lipoprotein lipase

2: Inactivates lipoproteindipase

3: Facilitates triglyceride transpo

4: All of the above

171-: Hunter syndrome is due to deficiency of -

1: Beta galactosidase

2: Sphingomyelinase

3: Iduronate Sulfatase

4: Hyaluronidase

172-: The apoprotein associated with LCAT is

1: Apo A

2: Apo B

3: Apo C

4: Apo E

173-: Ketone bodies are all except-

1: Acetoacetate

2: Acetone

3: b-hydroxy butyrate

4: Acetyl-CoA

174-: Phospholipids include all except

1: Plasmalogens

2: Dipalmitoyl lecithin

3: Ceramide

4: Cardiolipin

175-: Tangier's disease is characterized by:

1: Low or absence of HDL

2: Low LDL concentration

3: Raised chylomicrons

4: Deficiency of LPL

176-: Which one of the following PUFA is considered to be the main source of eicosanoids in human tissues?

1: Linoleate

2: Linolenate

3: Arachidonate

4: Palmitate

177-: Ketosis is caused by -

1: Excessine utilization of glucose

2: Over production of acetyl-CoA

3: Excessine secretion of insulin

4: Excessine intake of carbohydrates

178-: Catabolism of long chain fatty acids occur in:

1: Mitochondria

2: Peroxisome

3: Endolysosome

4: Golgi bodies

179-: Carnitine helps in -

1: Transport of fatty acids from mitochandria to cytosol

2: Transport of fatty acids from cytosol to mitochondria

3: Transport of pyrurate into mitochondria

4: Transport of Malate in Malate shuttle

180-: In which condition hemolysis occurs on oxidation?

1: G6PD deficiency

2: Hereditary spherocytosis

3: Sickle cell anemia

4: Hemophilia

181-: Metachromatic leukodystrophy is due to deficiency of -

1: Hexosaminidase A

2: Hexosaminidase B

3: Ceramidase

4: Arylsulfatase

182-: All of the following are o3 fatty acids, EXCEPT?

1: a-Linolenic acid

2: Eicosapentaenoic acid

3: Docosahexaenoic acid

4: g-Linolenic acid

183-: All of the following are phospholipids, EXCEPT?

1: Cardiolipin

2: Cerebroside

3: Sphingomyelin

4: Surfactant lipid

184-: b-Oxidation of odd-carbon fatty acid chain produces:

1: Succinyl CoA

2: Propionyl CoA

3: Acetyl CoA

4: Malonyl CoA

185-: Ketone bodies are not utilized by

1: Brain

2: RBC

3: Hea

4: Skeletal muscle

186-: Lipoprotein x is an indirect estimate of :

1: Hepatitis

2: Myocardial infarction

3: Cholestasis

4: Atherosclerosis

187-: Which of the following statements about High-Density Lipoprotein (HDL) is false?

1: HDL increases oxidation of LDL

2: HDL reduces foam cell production by LDL

3: HDL is the best predictor of CAD

4: HDL helps to clear lipids from atheromas

188-: Most essential fatty acid is:

1: Linolenic acid

2: Linoleic acid

3: Arachidonic acid

4: Eicosapentanoic acid

189-: Hormone sensitive lipase acts on:

1: Triglycerides

2: Cholesterol ester

3: Phospholipids

4: Gangliosides

190-: Aromatic enzyme complex is involved in the biosynthesis of

1: Cholesterol

2: Adrenal homones

3: Vitamins D3

4: Estradiol/estrogens

191-: A patient with eruptive xanthomas, drawn blood milky in appearance. Which lipoprotein is elevated in the plasma?

1: Chylomicron

2: Chylomicron remnants

3: LDL

4: HDL

192-: First step in synthesis of eicosanoids is?

1: Activation of lipooxygenase

2: Activation of PGH2 synthetase

3: Activation of hydrolase

4: None

193-: Krabbe's disease is caused by a defect of -

1: Ceramidase

2: b galactosidase

3: a galactosidase

4: Galactosyl ceramidase

194-: Which of the following is the allosteric activator of Acetyl-CoA carboxylase?

1: Malonyl-CoA

2: Acetyl-CoA

3: Citrate

4: Biotin

195-: Primary bile acid is

1: Deoxycholic acid

2: Lithocholic acid

3: Chenodeoxycholic acid

4: None

196-: Which of the following has maximum density -

1: VLDL.

2: LDL

3: HDL

4: Chylomicrons

197-: Which of the following disease is a lysosomal storage disease that is associated with the synthesis of abnormal myelin?

1: Tay-Sachs disease

2: Niemann-Pick disease

3: Metachromatic leukodystrophy

4: Hurler disease

198-: Most essential fatty acid is

1: Linoleic acid

2: Linolenic acid

3: Arachidonic acid

4: Palmitic acid

199-: Ketone bodies are synthesized

1: Cytosol

2: ER

3: Miochondria

4: Peroxisomes

200-: Which one of the following best represents de novo fatty acid biosynthesis starting with cytosolic citrate?

1: NADH is Required - no; Major Product is - Palmitic acid; Occurs at a Glucagon-to-insulin Ratio Best Described as - low; Required Cofactors - Biotin

2: NADH is Required - no; Major Product is - Stearic acid; Occurs at a Glucagon-to-insulin Ratio Best Described as - high; Required Cofactors - Coenzyme A

3: NADH is Required - no; Major Product is - Palmitic acid; Occurs at a Glucagon-to-insulin Ratio Best Described as - low; Required Cofactors - Biotin and Coenzyme A

4: NADH is Required - yes; Major Product is - Stearic acid; Occurs at a Glucagon-to-insulin Ratio Best Described as - high; Required Cofactors - Biotin

201-: Which fatty acid is found exclusively in breast milk:

1: Linoleic Acid

2: Linolenic Acid

3: Palmitic Acid

4: Docosahexaenoic Acid

202-: Refsum's disease is characterized by increased levels of

1: Phytanic acid

2: Ascorbic acid

3: Acetic acid

4: None

203-: Principle building block in fatty acid synthesis:

1: Acetyl CoA

2: Palmitoyl CoA

3: Malonyl CoA

4: Oleate

204-: Triglyceride content is lowest in:(1998)

1: HDL

2: LDL

3: VLDL

4: Chylomicrons

205-: A 2-day-old infant born at 32 weeks' gestation has had breathing difficulties since birth and is currently on a respirator and 100% oxygen. These difficulties occur because of which one of the following?

1: An inability of the lung to contract to exhale

2: An inability of the lung to expand when taking in air

3: An inability of the lung to respond to insulin

4: An inability of the lung to respond to glucagon

206-: A 12 year old boy is brought to emergency by his parents with complaints of severe polydipsia and polyuria.Laboratory examination reveals a purple ring when a test was done in her urine.Which of the following is the most likely source of this compound which is positive in this patient?

1: Gluconeogenesis

2: Fatty acid breakdown

3: Protein breakdown

4: Side chain of cholesterol

207-: Fatty acids are oxidized by all the following tissues, Except

1: Liver

2: Adipose tissue

3: Brain

4: Skeletal muscle

208-: Main lipid component of LDL

1: Triacylglycerol

2: Cholesterol

3: Phospholipids

4: Free fatty acids

209-: Broad beta band in electrophoretic pattern of lipoproteins present in:

1: Type I hyperlipoproteinemia

2: Type IIa hyperlipoproteinemia

3: Type III hyperlipoproteinemia

4: Type IV hyperlipoproteinemia

210-: Adrenoleukodystrophy is associated with:

1: Accumulation of very long chain fatty acids

2: Accumulation of medium chain fatty acid

3: Increased plasmalogen

4: Decreased pipecolic acid

211-: Cholesteryl ester transfer protein transport cholesterol from HDL to -

1: VLDL

2: IDL

3: LDL

4: Chylomicrons

212-: The immediate precursor of mevalonic acid is

1: Mevalonyl CoA

2: Mevalonyl pyrophosphate

3: Acetoacetyl CoA

4: Beta hydroxy-beta methyglutaryl CoA

213-: ApoE, ApoC is synthesized by -

1: Liver

2: Kidney

3: intestine

4: RBCs

214-: Arrange the steps of formation of creatinine from glycine in sequence: A. Transpo of creatine from liver to muscle blood B. Formation of guanidino acetic acid from arginine and glycine C. Formation of creatine by methyl transferase D. Formation of creatine phosphate E. Conversion of creatine phosphate to creatinine

1: B- C-A- D - E

2: A- D-C- E - B

3: D- A-E- C - B

4: C- D-B- E - A

215-: Which of the following is an Omega-3 fatty acid?

1: Linoleic acid

2: a-Linolenic acid

3: Oleic acid

4: Arachidonic acid

216-: The human plasma lipoprotein containing the highest percentage of triacylglycerol by weight is?

1: LDL

2: Chylomicrons

3: VLDL

4: HDL

217-: The enzyme is the rate limiting enzyme in cholesterol synthesis is:

1: HMG CoA synthetase

2: HMG CoA reductase

3: HMG CoA lyase

4: Catalase

218-: The following is a Ketone body

1: Oxalocetate

2: Pyruvic acid

3: Acetyl COA

4: Acetoacetate

219-: Metachromatic leukodystrophy is due to deficiency of

1: Hexosaminidase A

2: Hexosaminidase B

3: Ceramidase

4: Arylsulfatase

220-: Reverse cholesterol transport is done by:

1: VLDL

2: LDL

3: HDL

4: Chylomicrons

221-: True about bile acids is?

1: 7a hydroxylase is the rate limiting enzyme in the synthesis

2: They are derived from cholesterol

3: Cholic acid is primary bile acid

4: All of the above

222-: Deficiency of Acid lipase:-

1: Fabry disease

2: Gaucher disease

3: Farber disease

4: Wolman disease

223-: Hurler syndrome is due to deficiency of

1: Beta galactosidase

2: Sphingomyelinase

3: Heparitin Sulphate

4: Hyaluronidase

224-: Enzyme deficient in Tay-sach's disease :

1: a galactosidase

2: Hexosaminidase A

3: b galactosidase

4: b glucosidase

225-: Acetyl-CoA is transpoed out of the mitochondria in order to serve as a substrate for fatty acid or cholesterol synthesis. Which of the following enzymes used in this transpo process provides NADPH required for these reductive biosynthesis reactions?

1: ATP-citrate lyase

2: Citrate synthase

3: Malate dehydrogenase

4: Malic enzyme

226-: b-galactosidase deficiency is seen in -

1: Tay-Sach disease

2: Niemann - Pick disease

3: Gaucher's diseased

4: Krabbe's disease

227-: Branded chain ketoacid decarboxylation is defective in

1: Maple syrup urine disease

2: Hanup disease

3: Alkaptonuria

4: GM1 gangliosidosis

228-: Fatty acid synthesis takes place in -

1: Cytosol

2: Mitochondria

3: Lysosome

4: Nucleus

229-: Tangier disease is due to deficiency of

1: LDL

2: HDL

3: VLDL

4: Chylomicrons

230-: If in a person, Total Cholesterol=300 mg/dL, HDL= 25mg/dL and TG=150mg/dL, find out the value of LDL-

1: 245

2: 125

3: 95

4: 55

231-: Lipoprotein-associated with carrying cholesterol from periphery tissues to liver is

1: HDL

2: LDL

3: VLDL

4: IDL

232-: A 4-month-old child exhibited extreme tiredness, irritable moods, poor appetite, and fasting hypoglycemia associated with vomiting and muscle weakness. Blood test showed elevated levels of free fatty acids, but low levels of acylcarnitine. A muscle biopsy demonstrated a significant level of fatty acid infiltration in the cytoplasm. The most likely molecular defect in this child is in which one of the following enzymes?

1: MCAD

2: Carnitine transporter

3: Acetyl-CoA carboxylase

4: CAT II

233-: In fatty acid synthesis CO2 step loss occurs in which?

1: Hydration

2: Dehydration

3: Condensation reaction

4: Reduction

234-: Which of the following has highest electrophoretic mobility and least lipid content?

1: Chylomicrons

2: HDL

3: LDL

4: VLDL

235-: Mineral required for cholesterol biosynthesis -

1: Fe

2: Mn

3: Mg

4: Cu

236-: Fatty liver is due to excessive accumulation of

1: Triacylglycerols

2: Phospholipids

3: Cholesterol

4: Free fatty acids

237-: In primary familial hypercholesterolemia, there is defect in:

1: LDE-receptors

2: Apoprotein

3: Apoprotein B

4: VLDL

238-: HDL3 is conveed to HDL2 by:

1: CETP

2: LCAT

3: Both

4: PLTP

239-: Which helps in the transport of chylomicrons from intestine to liver?

1: Apoprotein B

2: Apoprotein A

3: Apoprotein C

4: Apoprotein E

240-: A 10-yr old boy was admitted for surgery of cleft lip. Suddenly he had acute pain in abdomen. On examination, he had Xanthomas. On investigation, we found milky plasma. Which lipoprotein is increased?

1: VLDL Remnant

2: Chylomicron

3: Triglycerides

4: Cholesterol

241-: LCAT is activated by?

1: Apo AI

2: ApoCII

3: Apo E

4: Apo B 100

242-: Fuel utilized by brain in starvation -

1: Ketone bodies

2: Fatty acid

3: Glycogen

4: Any of the above

243-: Rate limiting step in cholesterol synthesis is?

1: HMG CoA synthetase

2: HMG CoA reductase

3: Thiokinase

4: Mevalonate kinase

244-: A 10-year-old boy is presented to ophthalmology OPD for white ring around the black of the eye. His father died of coronary heart disease. O/E Corneal arcus is found, xanthoma on Achilles tendon. His fasting blood cholesterol >300 mg/dl, Triglycerides within normal limit. What is the diagnosis?

1: Type I Hyperlipoproteinemia

2: Type II A Hyperlipoproteinemia

3: Type II B Hyperlipoproteinemia

4: Type III Hyperlipoproteinemia

245-: Glycolipids are formed in -

1: Mitochondria

2: Cytosol

3: Peroxisomes

4: Endoplasmic reticulum

246-: Ketone bodies cannot be utilized by which of the following?

1: Skeletal muscle

2: Red blood cells

3: Brain

4: Heart

247-: A child presents with hepatosplenomegaly and pancytopenia. Bone marrow shows "crumbled tissue paper appearance". It is due to accumulation of:

1: Glucocerebroside

2: Sphingomyelin

3: Ganglioside

4: Galactocerebroside

248-: In which hyperlipoproteinemia is chylomicron level increased?

1: Type I

2: Type IIb

3: Type III

4: Type IV

249-: In cholesterol transpo which is not needed

1: Liver

2: Kidney

3: Intestine

4: Fat

250-: Leukotrienes are produced from ?

1: Cholesterol

2: Arachidonic acid

3: Stearic acid

4: Palmitic acid

251-: Tangier's diseases are characterized by?

1: Low or absence of HDL

2: Deficiency of LPL

3: Low LDL concentration

4: Raised chylomicrons

252-: Long chain fatty acids penetrates in the inner mitochondrial membrane through

1: Free fatty acids

2: Carnitine derivatives

3: Thiokinase

4: Malonyl CoA

253-: Lipase that is regulated by glucagon:

1: Lipoprotein lipase

2: Hormone sensitive lipase

3: Gastric lipase

4: Pancreatic lipase

254-: Which of the following is not the component of Multien- zyme Fatty Acid Synthase Complex?

1: Acetyl transacylase

2: Enoyl reductase

3: Malonyl transacylase

4: Monoamine oxidase

255-: In beta-oxidation of fatty acids carnitine is required for

1: Conversion of sho chain fatty acids to long chain fatty acids

2: Transpo of long chain fatty acid to mitochondrial inner layer

3: Transpo of long chain fatty acid to cytoplasm

4: Conversion of long chain fatty acids to sho chain fatty acids

256-: Cofactor for lipoprotein lipase is

1: apo A-I

2: apo A-II

3: apo C-II

4: apo C-III

257-: Dietary cholesterol is transpoed from intestine to liver by:

1: Apo-A

2: Apo-B

3: Apo-C

4: Apo-E

258-: In a child with cerebrohepatorenal syndrome and with hypotonia and hepatomegaly, the probable biochemical defect is accumulation of:

1: Pyruvate

2: Short chain fatty acids

3: Very long chain fatty acids

4: Acetyl CoA

259-: The only energy-requiring step in fatty acid oxidation is catalyzed by _____ enzyme?

1: Thiokinase

2: Acyl co A dehydrogenase

3: Thiolase

4: Beta hydroxy Acyl co A dehydrogenase

260-: Second messenger is produced from:

1: Phosphatidylinositol

2: Phosphatidylserine

3: Phosphatidylcholine

4: None

261-: First hormone to be produced in cholesterol synthesis is?

1: Epinephrin

2: Ergosterol

3: Lanosterol

4: Secretin

262-: Enzyme replacement is mostly done for:

1: Niemann pick's

2: Gangliosidosis

3: Gaucher's disease

4: Phenylketonuria

263-: Beta glucosidase deficiency causes -

1: Gaucher's disease

2: Fabry's disease

3: Krabbe's disease

4: GM1 gangliosidosis

264-: In synthesis of fatty acid, energy is supplied by

1: NAD

2: FAD

3: GTP

4: NADPH

265-: Cardiolipin is found in

1: Outer membrane of mitochondria

2: Inner membrane of mitochondria

3: Lysosomes

4: Rough endoplasmic reticulum

266-: Stored triacylglycerol and cholesterol are released by

1: Lysosomal lipase

2: Lipoprotein lipase

3: LCAT

4: Hormone sensitive lipase

267-: Endogenous triglycerides in plasma are maximally carried in

1: VLDL

2: Chylomicrons

3: LDL

4: HDL

268-: Fatty liver is due to accumulation of ?

1: Triglycerides

2: Lipoprotiens

3: LDL

4: VLDL

269-: Most important polyunsaturated fatty acid:

1: Linolenic acid

2: Linoleicacid

3: Arachidonic acid

4: Ecosapentoie acid

270-: Which of the following is a GM2 gangliosidosis?

1: Sandhoff's disease

2: Niemann-Pick disease

3: Gaucher's disease

4: Fabry's disease

271-: Which of the following may be classified as a hydrophobic amino acid at pH 7.0?

1: Isoleucine

2: Aginine

3: Aspaic acid

4: Lysine

272-: Which among the following is the function of cholesterol in the Plasmalemma:

1: Increase fluidity of the lipid bilayer.

2: Decrease fluidity of the lipid bilayer

3: Facilitate the diffusion of ions through the lipid bilayer

4: Assist in the transpo of hormones across the lipid bilayer

273-: Maximum source of linoleic acid is

1: Coconut oil

2: Sunflower oil

3: Palm oil

4: Vanaspati

274-: Maximum linoleic acid is found in -

1: Safflower oil

2: Coconut oil

3: Mustard oil

4: Sunflower oil

275-: Which of the following has a Ketogenic effect on liver?

1: Insulin

2: Glucagon

3: GH

4: Androgen

276-: Concentration of which is inversely related to the risk of coronary heart disease -

1: VLDL

2: LDL

3: HDL

4: None

277-: Net ATPs produced by oxidation of Palmitic acid is -

1: 106

2: 26

3: 16

4: 129

278-: Krabbe's disease is due to deficiency of-

1: Sphingomyelinase

2: Beta galactocerebroside

3: Hexosaminidase

4: Arylsulfatase

279-: Which is an abnormal lipoprotein -

1: VLDL

2: Chylomicron

3: Lp (a)

4: LDL

280-: Apolipoprotein that acts as enzyme activator:

1: Apo A-II

2: Apo C-II

3: Apo B-100

4: Apo E

281-: Maximum density is seen in -

1: VLDL

2: LDL

3: HDL

4: Chylomicrons

282-: Familial hypercholesterolemia is

1: Deficient LDL receptors

2: Deficient HDL receptors

3: HMG CoA reductase deficiency

4: Deficient VLDL receptors

283-: Cholesterol is transpoed to aerial smooth muscle by

1: HDL

2: VLDL

3: LDL

4: IDL

284-: Cholesterol from the liver is transpoed to the tissue mainly by

1: HDL

2: LDL

3: VLDL

4: Chylomicrons

285-: Hormone sensitive lipase is inhibited by-

1: Thyroid homone

2: Insulin

3: OH

4: ACTH

286-: Which of the following is/are bile acids -

1: Cholic acid

2: Lithocholic acid

3: Deoxychoiic acid

4: All of the above

287-: Which of the following is a cardioprotective fatty acid?

1: Palmitic acid

2: Stearic acid

3: Oleic acid

4: Omega-3 fatty acids

288-: Ketone body is not utilised by -

1: Neurons

2: Kidney

3: Muscle

4: Liver

289-: Lysosomal accumulation of sphingomyeline is seen in-

1: Niemann-Pick disease

2: Farber's disease

3: Tay Sach's disease

4: Krabbe's disease

290-: A child presents with hypotonia and seizures. It was confirmed to be cerebrohepatorenal syndrome. Which of the following is accumulated in the brain in cerebrohepatorenal syndrome?

1: Glucose

2: Long chain fatty acid

3: Triglycerides

4: Lactic acid

291-: Rate limiting enzyme in fatty acid synthesis -

1: PDH dehydrogenase

2: Malonyl reductase

3: Acety l CoA carboxylase

4: Transacetylase

292-: Which decreases risk of coronary artery disease?

1: LDL

2: HDL

3: VLDL

4: IDL

293-: Lipoprotein A resembles:

1: Plasminogen

2: Plasmin

3: Thrombin

4: Prothrombin

294-: Essential fatty acids

1: Linoeic acid

2: Linolenic acid

3: Arachiconic acid Palmitic acid

4: Plamitic acid

295-: Which of the following is not a component of triglycerides?

1: Glycerol

2: Linoleic acid

3: Palmitic acid

4: Sphingosine

296-: Which of the following is a secondary bile acid?

1: Cholic acid

2: Chenodeoxy cholic acid

3: Litho Cholic acid

4: None

297-: Ketone bodies not utilised by:

1: Brain

2: RBC

3: Heart

4: Skeletal muscle

298-: Long chain fatty acids penetrate the inner mitochondrial membrane as

1: Carnitine derivatives

2: Pyruvate

3: Acetyl coA derivatives

4: Acyl CoA

299-: Which vitamin is given in Type 2B Familial Hyperlipidemia:

1: Pantothenic acid

2: Riboflavin

3: Nicotinic acid

4: Thiamine

300-: In cholesterol synthesis, which is rate limiting amino acid

1: HMG CoA reductase

2: HMG CoA synthetase

3: 7 alpha hydroxylase

4: Phosphofructokinase

301-: Which of the following takes place in low insulin/glucagon ratio?

1: Cholesterol synthesis

2: Glycogen synthesis

3: Ketogenesis

4: Fatty acid synthesis

302-: All are steroids except -

1: Testosterone

2: Vitamin D

3: Cholesterol

4: Thyroxine

303-: All of the following disorders are inherited in autosomal recessive mode, except:

1: Sandhoff's disease

2: Niemann-Pick disease

3: Gaucher's disease

4: Fabry's disease

304-: Which of these fatty acids is found exclusively in breast milk?

1: Linoleate

2: Linolenic

3: Palmitic

4: Docosahexaenoic acid

305-: Immediate precursor of acetoacetate:

1: HMG CoA

2: Acetoacetyl CoA

3: Acetyl CoA

4: Malonyl CoA

306-: The major source of NADPH for fatty acid synthesis

1: PPP

2: TCA cycle

3: Glycolysis

4: Glycogenolysis

307-: Which of the following is not a component of Sphingomyelin?

1: Choline

2: Sphingosine

3: Phosphoric acid (H3 PO4)

4: Glycerol

308-: The formation of glycine takes place by transamination of

1: Alanine

2: Glyoxylate

3: Aspaate

4: Glutamate

309-: Defect in ty pe II hyperlipidemia -

1: Apo-E

2: Lipoprotein lipase

3: LDL receptor

4: None

310-: Unsaturated fatty acids are synthesized in the

1: Plasma membrane

2: Endoplasmic reticulum

3: Cytosol

4: Golgi complex

311-: A membrane phospholipid that does not contain glycerol is

1: Lecithin

2: Sphingomyelin

3: Cardiolipin

4: Ceramide

312-: The broad beta disease is due to defect in

1: Apo A

2: Apo B

3: Apo C

4: Apo E

313-: Fish oil is not used in the treatment of:

1: Type 2A Hyperlipoproteinemia

2: Type 2B Hyperlipoproteinemia

3: Type 3 Hyperlipoproteinemia

4: Type 5 Hyperlipoproteinemia

314-: Site of fatty acid synthesis -

1: ER

2: Mitochondria

3: Cytosol

4: Microsoma

315-: Ketone body formation without glycosuria is seen in -

1: Diabetes mellitus

2: Diabetes insipidus

3: Starvation

4: Obesity

316-: Lipogenesis occurs in

1: Liver

2: Skeletal muscles

3: Myocardium

4: Lungs

317-: Ketosis is caused by

1: Excessine utilization of glucose

2: Over production of acetyl-CoA

3: Excessine secretia of insulin

4: Excessine intake of carbohydrates

318-: The double bond in cholesterol structure is found in

1: Ring D

2: Ring C

3: Ring B

4: Ring A

319-: Triglycerides are transpoed from the liver to the tissues by

1: HDL

2: LDL

3: VLDL

4: Chylomicrons

320-: Whole range of COX products can be synthesized by?

1: Spleen,Liver

2: Lung,Liver

3: Spleen,Lung

4: Spleen,Blood vessel

321-: Main part of surfactant is formed by -

1: Dipalmitovl phosphatidyl choline

2: Phospbotidyl-inositol

3: Dipalmitovl cephaline

4: Dipalmitovl serine

322-: Not a fatty acid synthase component?

1: Acetyl COA carboxylase

2: Enoyl reductase

3: Acyl COA

4: Ketoacyl synthase

323-: Long chain fatty acid transported into inner mitochondria membrane by:

1: Acyl carrier protein

2: Acyl carnitine

3: Simple diffusion

4: Energy mediated

324-: Examples of monounsaturated fatty acids are

1: Oleic

2: Arachiodonic acid

3: Linolenic acid

4: Lysine

325-: An 8-month-old baby girl had normal growth and development for the first few months, but then progressively deteriorated with deafness, blindness, atrophied muscle, inability to swallow, and seizures. Early on in the diagnosis of the child, it was noticed that a cherry red macula was present in both eyes. Considering the child in the above case, measurement of which one of the following would enable one to determine whether the mutation were in the hex A or hex B gene?

1: GM1

2: GM2

3: Globoside

4: Glucocerebroside

326-: Familial hypercholesterolemia is:

1: Deficient LDL receptors

2: Deficient HDL receptors

3: HMG-CoA reductase deficiency

4: Deficient VLDL receptors

327-: Apo-E dificiency is seen in

1: Type I hypolipoproteinemis

2: Type II hypolipoproteinemis

3: Type III hypolipoproteinemis

4: Type IV hypolipoproteinemis

328-: Steroid synthesis takes place at

1: Ribosomes

2: Smooth enoplasmic reticulum

3: Peroxisomes

4: Lysosomes

329-: The human plasma lipoprotein containing the highest percentage of triacylglycerol by weight is

1: VLDL

2: Chylomicrons

3: HDL

4: LDL

330-: Arachidonic acid is synthesized from

1: Stearic acid

2: Linoleic acid

3: Linolenic acid

4: Oleic acid

331-: Which of the following is not synthesised from mevalonate?

1: Farnesyl pyrophosphate

2: Geranyl pyrophosphate

3: Dolichol

4: Ubiquitin

332-: Beta oxidation of fatty acids occur in?

1: Nucleus

2: Mitochondria

3: Cytoplasm

4: Peroxisomes

333-: Conversion of stearic acid to oleic acid is catalysed by:

1: D3desaturase

2: D6desaturase

3: D9desaturase

4: D12desaturase

334-: Which of the following has maximum medium chain fatty acid content:

1: Sunflower oil

2: Flaxeed oil

3: Coconut oil

4: Fish oil

335-: Lipogenesis occurs in which cellular compartment:

1: Cytosol

2: Endoplasmic reticulum

3: Golgi body

4: Mitochondria

336-: Role of somatotropine in fat metabolism

1: Antilipolytic

2: Lipolytic

3: Ketogenic

4: Glucogenic

337-: Barth syndrome is due to defect in -

1: Thermogenic

2: Cardiolipin

3: Ubiquinone

4: Cytochrome

338-: Ketone bodies are used by all except

1: Brain

2: RBCs

3: Skeletal muscles

4: Hepatocytes

339-: Maximum cholesterol is seen in

1: VLDL

2: LDL

3: HDL

4: Chylomicrons

340-: Apolipoprotein E is rich in -

1: Lysine

2: Arginine

3: Histidine

4: Methionine

341-: Phospholipid that plays an impoant role in apoptosis is?

1: Phosphatidylcholine

2: Phosphatidylserine

3: Phosphatidylethanolamine

4: Phosphatidylglycerol

342-: b-oxidation of fatty acids with odd number of carbon atoms yield -

1: Acetyl CoA

2: Propionyl CoA

3: Both

4: None

343-: The co-enzyme required for the synthesis of fatty acid synthesis:

1: FAD

2: FADH2

3: NAD

4: NADPH2

344-: Fatty acid in cholesterol is mainly:

1: Linoleic

2: Oleic

3: None

4: Arachidonic

345-: Apolipoprotein E is rich in

1: Lysine

2: Arginine

3: Histidine

4: Methionine

346-: Which of the follow ing occurs in mitochondria -

1: Glycolysis

2: HMP shunt

3: TCA cycle

4: Glycogenesis

347-: A patient with abetalipoproteinemia frequently manifests with delated blood clotting. This is due to inability to

1: Produce VLDL

2: Synthesize fatty acids

3: Produce chylomicrons

4: Synthesize clotting factors

348-: Acetyl-CoA carboxylase activity requires:

1: Pantothenate

2: Biotin

3: Thiamine pyrophosphate

4: Riboflavin

349-: Which of the following is NOT involved in imparting rancidity to Fats?

1: Oxidation

2: Hydrolysis

3: Reduction

4: Cyclization of hydrocarbons

350-: Which fatty acid is first synthesized by man?

1: Linoleic acid

2: Stearic acid

3: Palmitic acid

4: Oleic acid

351-: Catabolism of long chain fatty acids occurs in?

1: Peroxisome

2: Mitochondria

3: Golgi bodies

4: Endolysosome

352-: All of the following are true statements regarding the regulation of cholesterol synthesis, EXCEPT?

1: Binding of SREBP to SRE enhances the transcription of HMG-CoA reductase

2: HMG-CoA reductase is active in phosphorylated form

3: Insig1 is involved in the degradation of HMG-CoA reductase

4: Mevalonate inhibit the HMG-CoA reductase

353-: Ketone bodies are synthesized -

1: Cytosol

2: ER

3: Miochondria

4: Peroxisomes

354-: The human plasma lipoprotein containing the highest percentage of triacylglycerol by weight is:

1: VLDL

2: Chylomicrons

3: HDL

4: LDL

355-: Which of the following is not a phospholipid?

1: Lecithine

2: Plasmalogen

3: Cardiolipin

4: Ganglioside

356-: Rotheras test is used for -

1: Bilirubine in urine

2: Sugar in urine

3: Protein in urine

4: Ketone bodies in urine

357-: A 28-year-old man was found to have elevated cholesterol levels of 325 mg/dL on a routine checkup. His father died of a hea attack at the age of 42, and also had markedly elevated cholesterol levels throughout his life. The man's physician placed him on lovastatin, and his cholesterol levels dropped to 170 mg/dL. The nature of the elevated cholesterol in this patient is most likely due to a mutation in which one of the following proteins?

1: Microsomal triglyceride transfer protein

2: LCAT

3: Lipoprotein lipase

4: LDL receptor

358-: The deficient enzyme in Niemann-Pick disease is:

1: b-Glucosidase

2: Sphingomyelinase

3: b-Galactosidase

4: Cerebrosidase

359-: All are lysosomal storage disorders except -

1: I cell disease

2: Hunter's disease

3: Me Ardle's Disease

4: Farber's disease

360-: Ketone bodies which is maximum in diabetic keto acidosis is:

1: Acetone

2: Pyruvate

3: Acetoacetic acid

4: B-hydroxy butyrate

361-: In cholesterol transport which is not needed -

1: Liver

2: Kidney

3: Intestine

4: Fat

362-: VLDL is formed in -

1: Intestine

2: Liver

3: From chylomicrons

4: Blood

363-: All are PUFAs except:

1: Linoleic acid

2: Linolenic acid

3: Palmitic acid

4: Arachinodoic acid

364-: Lipid peroxidation as a part of ageing and injury of cells is:

1: Free radical theory

2: Apoptosis theory

3: Enzyme cascade theory

4: Cell destruction theory

365-: Fatty acids used by all except -

1: Liver

2: Muscle

3: Brain

4: Kidney

366-: Beta Oxidation in Peroxisome generates:

1: H2O2

2: NADPH

3: Long Chain fatty acid

4: FADH2

367-: Action of lipoprotein lipase:

1: Activation of IP3-DAG.

2: Hydrolysis of triglycerides in chylomicrons.

3: Coupling of DAG & MAG to form triglycerides.

4: Hydrolysis of dietary and endogenous triglycerides

368-: Lipoprotein associated with carrying cholesterol from peripheral tissues to liver is -

1: HDL

2: LDL

3: VLDL

4: IDL

369-: All of the following statements are true about regulation of cholesterol synthesis, EXCEPT?

1: HMG-CoA reductase is inhibited by mevalonate

2: HMG-CoA reductase is inhibited by cholesterol

3: SREBP increases the transcription of HMG-CoA reductase

4: Thyroid hormone decreases the HMG-CoA reductase activity

370-: Limiting factor for Fatty acid synthesis

1: Acetoacetate synthesis

2: Acyl transferase

3: Acetyl COA carboxylase

4: Biotin

371-: Carnitine helps in

1: Transpo of fatty acids from mitochandria to cytosol

2: Transpo of fatty acids from cytosol to mitochandria

3: Transpo of pyruvate into mitochandria

4: Transpo of Malate in Malate shuttle

372-: Which is most potent HDL:

1: Pre-beta HDL

2: HDL-2

3: HDL-3

4: Discoidal HDL

373-: In beta oxidation of palmitic acid if final product is acetoacetate then net gain of ATP is:

1: 21

2: 26

3: 106

4: 129

374-: Multiple sclerosis is characterized by a loss of which lipids:

1: Phospholipids and sphingolipids

2: Sphingolipids and ceramide

3: Phospholipids and ceramide

4: Sphingolipids and gangliosides

375-: Immediate precursor of ketone bodies

1: Acetyl - CoA

2: Acetoacetyl - CoA

3: HMG - CoA

4: Acyl - CoA

376-: Desired ratio of total cholesterol/HDL should be

1: <7.5

2: <10

3: <3.5

4: <4.5

377-: Which of the following lipoproteins has highest protein content ?

1: VLDL

2: LDL

3: HDL

4: Chylomicrons

378-: Staing point of ketone body synthesis -

1: Acetyl CoA

2: Acetoacetate

3: Beta hydroxy butyrate

4: Propionyl CoA

379-: Number of ATP formed by oxidation of one molecule of palmitic acid (16c):

1: 146

2: 106

3: 135

4: 34

380-: Free fatty acid produced in adipose tissue is transpoed by

1: Globulin

2: Albumin

3: Ceruloplasmin

4: None

381-: Which of the following has maximum density?

1: VLDL

2: LDL

3: HDL

4: Chylomicrons

382-: Rothera's test used for detection of:

1: Proteins

2: Glucose

3: Fatty acid

4: Ketones

383-: VLDL is formed in

1: Intestine

2: Liver

3: From chylomicrons

4: Blood

384-: Rate limiting enzyme in the synthesis of cholesterol is-

1: HMG CoA reductase

2: HMG CoA synthetase

3: Acetyl CoA synthetase

4: Acetyl CoA carboxylase

385-: A patient with a hyperlipoproteinemia would most likely benefit from a low-carbohydrate diet if the lipoproteins that are elevated in the blood belong to which class of lipoproteins? Choose the one best answer.

1: Chylomicrons

2: VLDL

3: LDL

4: HDL

386-: All of the following are Isoprene derivates (Polyprenoids), except ?

1: Ubiquitin

2: Dolichol

3: b-carotene

4: a-tocopherol

387-: What is required for beta-oxidation in cytosol?

1: Acetyl CoA

2: Pyruvate

3: Citrate

4: Alpha-ketoglutarate

388-: A patient was diagnosed with isolated increase in LDL. His father and brother had the same disease with increased cholesterol. The likely diagnosis is:

1: Familial type III hyperlipoproteinemia

2: Abetalipoproteinemia

3: Familial LPL deficiency (type I)

4: LDL receptor mutation

389-: Which of the following is true about cholesterol?

1: Made up of 25 carbons

2: There is a hydroxyl group at 5th carbon

3: Contain the cyclic tetra-perhydrophenanthrene ring

4: Amphipathic in nature

390-: Which has least density?

1: LDL

2: Chylomicrons

3: HDL

4: VLDL

391-: Fatty acids are not used by which organ -

1: Heart

2: Liver

3: Muscle

4: Brain

392-: Composed mainly of triacylglycerols synthesized in intestinal epithelial cells is

1: Chylomicrons

2: VLDL

3: LDL

4: HDL

393-: Fredrickson&;s type II hyperlipoproteinemia is due to excess amount of

1: VLDL remnats

2: VLDL

3: Floating LDL

4: HDL

394-: All of the following statements about Lipoprotein Lipase are true, except

1: Found in adipose tissue

2: Found in myocites

3: Deficiency leads to hyperiacyglycerolemia

4: Does not require CII as cofactor

395-: Which is the first intermediate in the conversion of cholesterol to bile acids?

1: Ergosterol

2: Lanosterol

3: 7- hydroxycholesterol

4: 7- dehydrocholesterol

396-: A patient was diagnosed with isolated increase in LDL. His father and brother had the same disease with increased cholesterol. The likely diagnosis is

1: Familial type III hyperlipoproteinemia

2: Abetalipoproteinemia

3: Familial lipoprotein lipase deficiency (type I

4: LDL receptor mutation

397-: Major source of NADPH for fatty acid synthesis is:

1: HMP shunt

2: TCA cycle

3: Glycolysis

4: Uronic acid pathway

398-: Phospholipids are

1: Simple lipids

2: Derived lipids

3: Compound lipids

4: None

399-: All are polyunsaturated fatty acids except:

1: Linoleic acid

2: Linolenic acid

3: Palmitic acid

4: Arachidonic acid

400-: Immediate precursor of acetoacetate

1: HMG CoA

2: Acetoacetyl CoA

3: Acetyl CoA

4: Malonyl CoA

401-: True regarding the main function of apoprotein CII:

1: Cholesterol synthesis

2: TG transport

3: Increases activity of lipoprotein lipase

4: Fatty acid synthesis

402-: Lipoprotein involved in reverse cholesterol transpo is

1: Chylomicrons

2: LDL

3: VLDL

4: HDL

403-: The reducing equivalents for cholesterol biosynthesis are provided by

1: FADH2

2: FMNH2

3: NADH

4: NADPH

404-: A patient has total cholesterol 300, TG 150, and HDL 25. What would be the LDL value? (All values in mg/dL)

1: 245

2: 125

3: 55

4: 35

405-: Which of the following statement is true about secondary bile acids?Rpt 2008 Q No54

1: Primary bile acids when conjugated with taurine and glycine forms secondary bile acids.

2: Deconjugated by bacteria in liver.

3: Reabsorbed by enterohepatic circulation

4: They are formed from bilirubin

406-: C17 H31 COOH is formula of:

1: Linoleic acid

2: Linolenic acid

3: Arachidonic acid

4: Timnodonic acid

407-: Krabbes&; disease is due to deficiency of

1: Sphingomyelinase

2: Beta galactocerebrosidase

3: Hexosaminidase

4: Arylsulfatase

408-: Which is the first intermediate product of LOX pathway?

1: LTs

2: HPETE

3: HETE

4: Lipoxins

409-: Apoprotein associated with LDL:

1: Apoprotein C

2: Apoprotein B-100

3: Apoprotein B-48

4: Apoprotein E

410-: A 2-year-old girl presented with recurrent abdominal pain. She was admitted in pediatrics for detailed work up. When her blood was drawn for investigation it was milky white. Yellowish white papules noted on the dorsum of hands. On fundoscopic examination opalescent retinal vessels were seen. Fasting triglycerides >1000mg/dL, but cholesterol level was normal. What is the diagnosis?

1: Familial chylomicronemia syndrome

2: Familial defective Apo B

3: Sitostrelomia

4: Familial dysbetalipoproteinemia

411-: Which cholesterol is designated as "Good Cholesterol"?

1: VLDL

2: LDL

3: HDL

4: IDL

412-: Which is the most essential fatty acid?

1: Linolenic acid

2: Linoleic acid

3: Arachidonic acid

4: Oleic acid

413-: Enzyme common to cholesterol synthesis and ketone body synthesis:

1: HMG CoA Reductase

2: HMG CoA Synthase

3: Beta hydroxy butyrate Dehydrogenase

4: Thiophorase

414-: The enzyme ^9 desaturase catalyzes the conversion of stearic acid into?

1: Linolenic acid

2: Linoleic acid

3: Oleic acid

4: All of the above

415-: Ketone bodies are all except

1: Acetoacetate

2: Acetone

3: b-hydroxy butyrate

4: Acetyl-CoA

416-: Essential fatty acid is -

1: Oleic acid

2: Stearic acid

3: Linoleic acid

4: Cervonic acid

417-: All of the following statements about apoproteins are true except

1: Apoprotein A-I activates LCAT

2: Apoprotein C-I activates lipoprotein lipase

3: Apoprotein C-II inhibits lipoprotein lipase

4: Apoprotein C-II activates lipoprotein lipase

418-: Cholesterol is not a precursor for synthesis of -

1: Vitamin D

2: Progesterone

3: Bile acids

4: Lipocortin

419-: Respiratory distress syndrome in premature infants is due to inadequate secretion of which one of the following lipids

1: Dipalmitoyl phosphatidylcholine

2: Spingomelin

3: Cholesterol

4: Phosphatidylinositol

420-: Full form of LCAT is:

1: Lecithin cholesterol acyltransferase

2: Lecithin choline acyl transferase

3: Lecithin cholesterol alkyl transferase

4: Lecithin choline alcohol transferase

421-: All are glycerophospholipids, except

1: Lecithine

2: Plasmalogens

3: Cardiolipin

4: Sphingomyeline

422-: A 30-year-old male patient came to Medicine OPD for swellings which looks like grapes, he said initially it was small cluster of swelling which later increased in size. He also complained of yellowish pigmentation of creases of palms. His fasting lipid profile was done, both cholesterol and triacylglycerols level was elevated. What is the diagnosis?

1: Familial chylomicronemia syndrome

2: Familial defective apo B

3: Sitostrelomia

4: Familial dysbetalipoproteinemia

423-: Which of the following is increased in lipoprotein lipase deficiency -

1: VLDL

2: LDL

3: HDL

4: Chylomicrons

424-: Good cholesterol found in: (PGI Dec 2007)

1: HDL

2: LDL

3: VLDL

4: IDL

425-: Scavenger receptors uptake

1: HDL

2: VLDL

3: LDL

4: IDL

426-: Glycine is used in the synthesis of all EXCEPT-

1: Purines

2: Creatine

3: Heme

4: Pyrimidines

427-: Rate limiting step in cholesterol synthesis -

1: beta-hydroxy-methyl glutaryl COA - Mevalonic acid

2: Acetyl COA+CO2 + AIP - Matonyl COA+ADP+Pi

3: L-Methyl malonyl COA Succinyl COA

4: Lactose + H2O - Glucose + Galactose

428-: Sandhoffs disease is d/t absence of which enzyme?

1: Beta-hexosaminidase

2: Beta-glucuronibase

3: Arylsulphatase

4: Alpha galactosidase

429-: Which of the following is not a product of complete hydrolysis of Sphingomyelin?

1: Choline

2: Phosphate

3: Ceramide

4: Palmitic acid

430-: Reducing equivalents in fatty acid synthesis are supplied by

1: NADH + H+

2: NADPH + H+

3: FADH2

4: QH2

431-: Which one of the following acts as lung surfactant:

1: Sphingomyelin

2: Lysolecithin

3: Dipalmitoyl lecithin

4: Cephalin

432-: NADPH is required in

1: HMP shunt

2: Gluconeogensis

3: Lipogensis

4: Glycogenolysis

433-: Solubility of cholesterol depends on:

1: Water

2: Phosphatidul choline

3: Bile salts

4: Cholesterol

434-: Which among the following is a cardioprotective fatty acid?

1: Palmitic acid

2: Stearic acid

3: Oleic acid

4: Omega-3 fatty acid

435-: Which organelle is involved in the case of sphinghomyelin deficiency:

1: Lysosome

2: Nucleus

3: Mitochondria

4: Cell membrane

436-: The main function of bile salts is:

1: Fat absorption

2: Vitamin absorption

3: Bowel motility control

4: Bacteriostatic

437-: Which of the following phospholipid has antigenic acitivity -

1: Plasma!ogen

2: Cardiolipin

3: Phosphatidylcholine

4: Sphingomyelin

438-: Major apolipoprotein of chylomicrons is

1: B-100

2: A-1

3: B-48

4: C-1

439-: Arrange the Electrophoretic pattern of serum lipoproteins in sequence staing from point of origin: A. Alpha lipoprotein B. Pre-beta lipoprotein C. Chylomicron D. Beta lipoprotein

1: C - D-B - A

2: B - D-A - C

3: D - A-B - C

4: B - A-C - D

440-: In a person, total cholesterol is 300 mg/dl. HDL is 25mg/dl, TG=150mg/dl. What is the level of LDL choelsterol?

1: 245

2: 95

3: 125

4: 55

441-: Ketone body that cannot be detected by Rothera's test:

1: Acetoacetate

2: Acetone

3: Beta hydroxy butyrate

4: All the above can be detected

442-: Tissues capable of utilizing the ketone bodies are all the following, EXCEPT:

1: Brain

2: Heart

3: RBCs

4: Skeletal muscles

443-: Free cholesterol is mostly found in?

1: Outer layer of membrane

2: Cytosol

3: Both sides of plasma membrane

4: Mitochondria

444-: Hydroxyproline and hydroxylysine occur principally in

1: Collagen

2: Elastin

3: Synovium

4: Hyaline

445-: Acyl carrier protein (ACP) occurs in a bound state to a derivative of the following vitamin

1: Biotin

2: Folic acid

3: Pantothenate

4: Pyridoxine

446-: Glucocorticoids (steroids) can be used as a treatment for asthma and inflammatory conditions whereas NSAIDs are used to treat inflammation but have no use in asthma treatment. Which of the following statements most accurately describes why these treatments differ?

1: Steroids block production of all eicosanoids, whereas NSAIDs only block production of thromboxanes and prostaglandins.

2: NSAIDs block production of all eicosanoids, whereas steroids only block production of leukotrienes.

3: NSAIDs block production of leukotrienes and prostaglandins, whereas steroids block production of thromboxanes and leukotrienes.

4: Steroids block production of leukotrienes and prostaglandins, whereas NSAIDs block production of leukotrienes and thromboxanes.

447-: Receptors on blood cells accept cholesterol from

1: HDL

2: LDL

3: VLDL

4: Chylomicrons

448-: Which of the following biochemical changes is not indicative of hyperlipidemia type II-A:

1: Total cholesterol increased

2: Triglycerides normal

3: LDL increased

4: HDL increased

449-: Which of the following is a primary ketone body?

1: Acetoacetate

2: Acetone

3: Beta hydroxy butyrate

4: All are primary

450-: The dietary fats are transmitted from GIT to adipocytes in the form of -

1: Diacyl glycerol

2: Triacylglvcerol

3: Fatmisseles

4: Chylomicrons

451-: Which of the following is required in the synthesis of acetylcholine -

1: Inositol

2: Carnitine

3: Glycine

4: Choline

452-: Zellweger syndrome is a disorder of -

1: Mitochondria

2: Lysosome

3: Golgi complex

4: Peroxisome

453-: Carnitine shuttle is involved in -

1: Fatty acid synthesis

2: Fatty acid oxidation

3: Cholesterol synthesis

4: Bile acid synthesis

454-: Which of the following is true about ketone bodies:

1: Acetoacetate is most common ketone body present in blood

2: Beta hydroxybutyrate is the first ketone body to be synthesized

3: Thiophorase is absent in liver

4: Muscle can not utilize ketone bodies

455-: Niemann-Pick disease occurs due to a defect in

1: Ceramidase

2: Sphinogomyelinase

3: Phospholipase C

4: b - galactosidase

456-: HDL is synthesized and secreted from :

1: Liver

2: Peripheral tissue

3: Adipose tissue

4: Muscle

457-: Steatorrhoea with increased triglycerides seen in deficiency of: (PGI Dec 2006)

1: Pancreatic lipase

2: Serum lipase

3: Lipoprotein lipase

4: Acetyl CoA carboxylase

458-: What is the biochemical defect in the Zellweger syndrome?

1: Peroxisomal biogenesis disorder

2: Lysosomal targeting disorder

3: Defect in glycosylation of proteins

4: Trisomy 21

459-: Cholesterol concentration is maximum in

1: HDL

2: Chylomicron

3: VLDL

4: LDL

460-: Fatty acid synthesis and degradation are similar in that both processes

1: Take place in the mitochondrion

2: Use acyl CoA-thioesters

3: Use NADPH or NADP as a cofactor

4: Have malonyl CoA as an intermediate

461-: Which of the following phospholipid has antigenic activity:

1: Plasmalogen

2: Cardiolipin

3: Phosphatidyl choline

4: Sphingomyelin

462-: Which of the following is a transfatty acid?

1: Oleic acid

2: Elaidic acid

3: Stearic acid

4: Arachidonic acid

463-: Which of the following phospholipid has antigenic activity?

1: Plasmalogen

2: Cardiolipin

3: Phosphatidylcholine

4: Sphingomyelin

464-: Bile acids are synthesized from -

1: Arachidonic acid

2: Acetyl CoA

3: Linolenic acid

4: Linoleic acid

465-: All the following are associated with increased risk of coronary hea disease except

1: Familial hypercholesterolemia

2: Familial hyperiacylglycerolemia

3: Familial hyperalphalipoproteinemia

4: Hepatic lipase deficiency

466-: Which of the following is an activator of LCAT ?

1: Apo B100

2: Apo B 48

3: Apo E

4: Apo A1

467-: Eukaryotic plasma membrane is made up of all except

1: Carbohydbrates

2: Triglycerides

3: Lecithin

4: Cholesterol

468-: Nieman pick disease is due to deficiency of

1: Sphingomyelinase

2: Ceramidase

3: Galactosidase

4: Glucosidase

469-: HMG CoA directly converted into all; except:

1: Acetyl CoA

2: Acetoacetate

3: Mevalonate

4: Acetoacetyl-CoA

470-: Sphingolipids are chiefly accumulated in:

1: CNS

2: Adipose tissue

3: Cardiac muscle

4: Skeletal muscles

471-: First fatty acid to form in fatty acid synthesis:

1: Palmitic acid

2: Stearic acid

3: Oleic acid

4: Pantothenic acid

472-: A 12-year-old intellectually disabled boy having short stature, protuberant abdomen with umbilical hernia, prominent forehead. His vision is normal. His parents are normal. What is metabolic defect in this disorder?

1: L-Iduronidase

2: Iduronate Sulfhatase

3: Aryl Sulfatase B

4: Beta Glucoronidase

473-: Triacylglycerol synthesis is enhanced by

1: Coisol

2: Glucagon

3: Insulin

4: Epinephrine

474-: Which of the following statements about High Density Lipoprotein (HDL) is false -

1: HDL increases oxidation of LDL

2: HDL reduces foam cell production by LDL

3: HDL is the best predictor of CAD

4: HDL helps to clear lipids from atheromas

475-: Ketone bodies are synthesized in which pa of body?

1: Brain

2: Liver

3: Hea

4: Intestine

476-: Which apolipoprotein is responsible for Alzeihmers disease

1: APOE1

2: APOE2

3: APOE3

4: APOE4

477-: In Gaucher's diseases, there is deficiency of -

1: Glucocerebrosidase

2: Glucokinase

3: Sphingomyelinase

4: G-6PD

478-: Mitochondria is involved in all of the following, except:

1: ATP production

2: Apoptosis

3: Tricarboxylic acid cycle

4: Fatty acid biosynthesis

479-: Lipids are transferred from intestine to liver by:

1: Chylomicrons

2: VLDL

3: HDL

4: LDL

480-: Which Cholesterol ester is maximum in plasma?

1: HDL

2: LDL

3: VLDL

4: Chylomicron

481-: Lipogenesis ored by which hormone?

1: Insulin

2: Glucagon

3: Coisol

4: None

482-: Ketogenesis takes place in:

1: Hepatic mitochondria

2: Hepatic cytoplasm

3: Hepatic microsome

4: Hepatic lysosome

483-: Rare limiting step in cholesterol synthesis is

1: HMG CoA synthetase

2: HMG CoA lyase

3: HMG CoA reductase

4: Mevalonate synthetase

484-: What is essential for transfer of fatty acid across mitochondrial membrane -

1: Creatine

2: Creatinine

3: Carnitine

4: None

485-: Rate controlling enzyme of fatty acid synthesis -

1: Thioesterase

2: Transacetylase

3: Acetyl-CoA carboxylase

4: Ketacyl synthase

486-: Hunters disease is caused by?

1: a-L-iduronidase

2: Iduronate sulfatase

3: Aryl Sulfatase

4: a-glucuronidase

487-: Which of the following is a derived lipid?

1: Fatty acids

2: Glycolipid

3: Phospholipid

4: Triglyceride

488-: Which of the following is true about action of LCAT?

1: Formation of fatty acids

2: Esterification of cholesterol

3: Hydrolysis of fatty acids

4: Adds ester group to fatty acids

489-: Acetyl CoA Carboxylase is activated by:

1: Malonyl-CoA

2: Citrate

3: Palmitoyl-CoA

4: Acetoacetate

490-: Which of the following is the major proteoglycan of synol fluid?

1: Chondroitin sulfate

2: Dermatan sulfate

3: Heparan sulfate

4: Hyaluronic acid

491-: Choose the one best answer that most accurately describes some properties of acetyl-CoA carboxylase.

1: Required Cofactor - Biotin; Intracellular Location - Mitochondrial; Allosteric Modifier - Citrate; Enzyme That Catalyzes a Covalent Modification - PKA

2: Required Cofactor - Biotin; Intracellular Location - Cytoplasmic; Allosteric Modifier - Citrate; Enzyme That Catalyzes a Covalent Modification - AMP-activated protein kinase

3: Required Cofactor - Thiamin; Intracellular Location - Mitochondrial; Allosteric Modifier - Acetyl-CoA; Enzyme That Catalyzes a Covalent Modification - PKA

4: Required Cofactor - Thiamin; Intracellular Location - Cytoplasmic; Allosteric Modifier - Acetyl-CoA; Enzyme That Catalyzes a Covalent Modification - AMP-activated protein kinase

492-: Fatty acids are stored as

1: Cholesterol

2: Triglycerides

3: Sphingomyelin

4: None

493-: Ketone body formation without glycosuria seen in

1: DM

2: DI

3: Prolonged starvation

4: Obesity

494-: Primary hypercholesterolemia is

1: Type I

2: Type IIa

3: Type IIb

4: Type III

495-: Hyperlipidemias are treated by administering the following vitamin in megadoses

1: B12

2: Folate

3: Thiamine

4: Niacin

496-: Regarding synthesis of triacyl glycerol in adipose tissue, all of the following are true except:

1: Synthesis from Dihydroxyacetone phosphate

2: Enzyme Glycerol kinase plays an important role

3: Enzyme Glycerol 3 phosphate dehydrogenase plays an important role

4: Phosphatidate is hydrolyzed

497-: Beta oxidation in peroxisome generate:

1: NADPH

2: H2O2

3: Long chain fatty acid

4: FADH2

498-: Sphingomyelinase deficiency is a feature of -

1: Niemann pick disease

2: Tay Sach's disease

3: Krabbe's disease

4: Fabry's disease

499-: Find out the value of LDL, if total cholesterol level is 300 mg/dL, HDL level is 25 mg/dL and triglycerides level is 150 mg/dL:

1: 55

2: 95

3: 125

4: 245

500-: The vitamin present in the fatty acid synthase complex is:

1: Pyridoxine

2: Folate

3: Pantothenate

4: Thiamine

501-: A person on total parenteral nutrition was given 62.5 g of protein. Calculate the amount of nitrogen present in this amount of protein.

1: 32 g

2: 6.25 g

3: 10 g

4: 100 g

502-: Trans fatty acids are known to form during

1: Hydrogenation of oils

2: Beta oxiation of palmitate

3: Rancidity of fats

4: Prostaglandin biosynthesis

503-: Impoant intermediate product of biosynthesis of fatty acid is

1: Cholesterol

2: Malonyl CoA

3: Acetyl CoA

4: Thioesterases

504-: Which of the following enzyme is absent in Wolman's disease?

1: Cholestrol ester hydrolase

2: Acid hydrolase

3: Acyl-CoA carnitine

4: Acid lipase

505-: A premature infant, when born, had low Apgar scores and was having difficulty breathing. The NICU physician injected a small amount of a lipid mixture into the child's lungs, which greatly reduced the respiratory distress the child was experiencing. In addition to proteins, a key component of the mixture was which one of the following?

1: Sphingomyelin

2: A mixture of gangliosides

3: Triacylglycerol

4: Phosphatidylcholine

506-: Which set of fatty acids is most effective increasing the cholesterol levels?

1: Linoleic and linolenic

2: Myristic and palmitic

3: Butyric and stearic

4: Oleic and palmitic

507-: Which of the following enzymes is the most impoant enzyme for regulating lipogenesis:

1: Hydratase

2: Acetyl-CoA carboxylase

3: Enoyl reductase

4: Acetyl transacetylase

508-: Which is not a PUFA?

1: Linoleic acid

2: Palmitoleic acid

3: Linolenic acid

4: Arachidonic acid

509-: In chronic diabetics the value of TG and VLDL are more because

1: Increased in activity of hepatic lipase

2: Increase in peripheral function of LDL receptors

3: Increased activity of lipoprotein lipase and decreased activity of hormone sensitive lipase

4: Increased activity of hormone sensitive lipase and decreased lipoprotein lipase activity

510-: Which of the following is the rate-limiting enzyme of bile acid synthesis?

1: microsomal 7-a hydroxylase

2: mitochondrial 7-a hydroxylase

3: microsomal 17-a hydroxylase

4: mitochondrial 17-a hydroxylase

511-: a-oxidation occurs in

1: Mitochondria

2: Peroxisomes

3: Cytosol

4: Golgi apparatus

512-: HDL is called good cholesterol because -

1: Removes cholesterol from extrahepatic tissues

2: Causes transport of cholesterol to extrahepatic tissues

3: Stimulate hepatic TGs synthesis

4: Activates lipoprotein lipase

513-: A 37-yr-old man in DKA has yellowish papules scattered over his trunk and extremities. A tube of plasma that is collected from the patient develops a turbid supernate. This is consistent with which type of hyperlipoproteinemia?

1: Type I

2: Type IIa

3: Type III

4: Type V

514-: Hormone-sensitive lipase is inhibited by

1: Thyroid homone

2: Insulin

3: GH

4: ACTH

515-: Dietary lipids are transported from intestine in -

1: Chylomicrons

2: VLDL

3: LDL

4: HDL

516-: Which is a lipotropic factor?

1: HDL

2: Insulin

3: Choline

4: Carnitine

517-: Which of the following can be oxidized by b- oxidation pathway?

1: Saturated fatty acids

2: Mono saturated fatty acids

3: Polyunsaturated fatty acids

4: All of these

518-: Lipoprotein involved in transfer of cholesterol from tissues to Liver is?

1: Chylomicron

2: LDL

3: VLDL

4: HDL

519-: N Methyl Glycine is known as:

1: Betaine

2: Sarcosine

3: Carnosine

4: Ergothionine

520-: Sphingomyelinase deficiency is characteristic of?

1: Fabry's disease

2: Krabbe's disease

3: Tay Sachs disease

4: Niemann Pick disease

521-: Free fatty acids in blood are carried by?

1: VLDL

2: LDL

3: Albumin

4: Chylomicron

522-: All are steroids except

1: Testosterone

2: Vitamin D

3: Cholesterol

4: Thyroxine

523-: Essential fatty acid -

1: Linoleic acid

2: Palmitoleic acid

3: Oleic acid

4: Arachidonic acid

524-: Lack of alpha-oxidation of fatty acids leads to

1: Accumulation of phytanic acid

2: Formation of dicarboxylic acid

3: Formation of propionic acid

4: Oxidation of branched chain fatty acid

525-: Niemann-Pick disease is characterized by:

1: Increased concentration of sphingomyelin in liver

2: Increased concentration of cerebrosides in liver and spleen.

3: Increased concentration of plasminogen

4: Increased accumulation of glycerol in liver

526-: Which of the following fatty acid present in fish-oil is known for its cardio-protective function?

1: Arachidonic acid

2: Eicosapentaenoic acid

3: Linoleic acid

4: Palmitic acid

527-: Rate controlling enzyme of fatty acid synthesis

1: Thioesterase

2: Transacetylase

3: Acetyl-CoA carboxylase

4: Ke tacyl synthase

528-: Lack of beta-oxidation of fatty acid leads to?

1: Oxidation of branched chain fatty acids

2: Phytanic acid accumulation

3: Dicarboxylic acid accumulation

4: Formation of propionic acid

529-: Which of the following phospholipid is associated with apoptosis?

1: Phosphatidylcholine

2: Dipalmitoyl Phosphatidylcholine

3: Phosphatidylserine

4: Phosphatidylinositol 4,5-bisphosphate

530-: The main apolipoprotein of LDL is

1: A-II

2: B-48

3: B-100

4: E

531-: True about conversion of 20C fatty acid conversion to prostaglandin synthase

1: First PG synthesized is PGI I2

2: It is rate limiting enzyme

3: It convees PGI H2 to PGI E2

4: The primary prostaglandin is PG H2

532-: Accumulation of sphingomyelin in lysosome occurs in which disease -

1: Niemann-Pick disease

2: Farber's disease

3: Tay Sach's disease

4: Krabbe's disease

533-: False about trans fatty acid

1: Increase risk of cardiovascular disease

2: Fried foods have high content of TFA

3: Hydrogenation increases TFA

4: Hydrogenation decreases TFA

Answers

Question No	Answer Option	Answer
1	2	NAD+
2	4	Apo E deficiency
3	1	Transport of long chain fatty acid
4	3	Acetyl-CoA carboxylase
5	3	Acetyl: CoA carboxylase
6	1	LDL
7	4	NANA, hexose, sphingosine, long chain fatty acid,
8	4	HMG CoA reductase is the rate-limiting enzyme
9	4	Transfer of activated long chain FFA into mitochondria
10	2	VLDL
11	2	HMG CoA reductase
12	2	APO-B-100
13	2	Apo protein E deficiency
14	1	Prostaglandins
15	4	HDL
16	3	Sterol
17	4	Facilitates the transfer of triacylglycerol from HDL to LDL
18	4	Archidonic acid
19	3	HDL
20	1	Chylomicrons
21	4	RBC

22	1	Progesterone
23	2	Acetaldehyde
24	1	Trigylcerids
25	4	Hormone sensitive lipase
26	2	A - I
27	4	Carbohydrates
28	2	HDL
29	1	3 glycerol, 4 fatty acids , 2 phosphates
30	1	Acetyl-CoA carboxylase
31	2	DHA (Docosa Hexaenoic Acid)
32	3	Type III
33	1	NADP dependent oxidation
34	2	Enzyme Glycerol Kinase plays an impoant role
35	4	Enterostatin
36	4	Chylomicrons
37	2	Acetoacetate
38	1	Liver
39	1	Below 200
40	1	Cardiolipin
41	4	HDL
42	1	Tay sach's disease
43	4	Removes cholesterol from extrahepatic tissues
44	1	Malondialdehyde
45	1	HDL
46	3	Prolonged starvation

47	2	Diglyceride+phosphate+choline
48	3	Reverse cholesterol transpo
49	3	Tay-Sachs disease
50	2	Glycine
51	3	VLDL
52	2	Defect in LDL receptor
53	4	Sphinogosine
54	1	Apo A1
55	2	Acetyl-CoA + Propionyl-CoA
56	1	HDL
57	1	b-oxidation
58	3	Citrate
59	2	Trans fatty acids
60	1	ApoA1
61	1	Liver
62	1	Gaucher's disease
63	3	Small Intestine
64	1	Sitosterol
65	3	Prolonged starvation
66	4	Acetyl CoA
67	4	Increased Alpha 2 macroglobulin
68	3	Lipocoin
69	4	Glycogen
70	2	16 carbon chain
71	3	Also digested in stomach

72	2	Mitochondria
73	2	Transport of long chain fatty acid to mitochondrial inner layer
74	2	Oleic acid
75	3	Acetyl-CoA carboxylase
76	2	Inositol triphosphate and Diacylglycerol
77	2	VLDL
78	3	Their levels increase in starvation
79	3	HDL
80	1	Lipoprotein-X
81	2	Lecithin
82	3	100
83	2	LDL
84	2	Mitochondria
85	4	Apo B 100
86	4	HDL
87	2	Phospholipase A2
88	1	APO B 100
89	2	Leucine
90	2	Atherosclerosis
91	1	Triacylglycerols
92	1	Increased LDL
93	2	LDL
94	4	All of these
95	3	HMG CoA reductase

96	2	Absence of LDL receptors on cells
97	2	Mitochondria
98	4	Hepatocytes
99	3	Chylomicrons
100	3	A decreased formation of bile salt micelles
101	2	Absence of LDL receptors on cells
102	4	It contains Apo-B4
103	3	Decrease HDL cholesterol
104	2	Lecithin
105	1	Apo A
106	3	Transports maximum amount of lipid
107	2	Fatty acid oxidation in peroxisomes
108	3	Elevated chylomicrons
109	2	HDL/LDL/VLDL/chylomicrons
110	1	Insulin
111	2	Oleic acid
112	3	Thromboxanes
113	4	Lipoprotein lipase
114	4	Enoyl CoA isomerase and 2,4 Dienoyl CoA reductase
115	2	Apo B48
116	1	HDL '
117	2	Requires NADH
118	3	Emulsification of lipids
119	2	Fatty acids
120	3	Keto acyl synthase

121	1	Zellweger Syndrome
122	4	Linoleic acid
123	2	Absence of LDL receptors on cells
124	1	Autosomal dominant
125	4	Apo B 100
126	1	LDL and HDL
127	2	LDL
128	1	Dipalmitoyl phosphatidycholine
129	1	HDL
130	3	RNA editing
131	4	7 FADH2, 7 NADH and 8 acetyl CoA molecules
132	2	B-100
133	2	Plasminogen
134	2	Niemann pick ds
135	1	Lipoprotein Lipase
136	1	Chylomicrons
137	2	Beta galactocerebrosidase
138	1	Niemann - Pick disease
139	2	Taurocholic aci
140	2	Triglycerides
141	2	HMG CoA reductase
142	2	Fatty acid oxidation
143	1	Palmitic acid
144	3	b-Hydroxybutyrate
145	3	Acetyl-CoA carboxylase

146	2	Medium chain FA
147	3	Propionyl CoA
148	3	It is a sphingophospholipid
149	4	Linoleic acid
150	1	Atherosclerosis
151	1	HDL
152	1	Linoleic acid
153	1	Choline
154	1	N-Acetylneuraminic acid (NANA), hexoses, sphingosine, long chain fatty acid
155	3	Mitochondrial Triglyceride Transfer Protein
156	1	Apo B100 mutation
157	1	Linoleic acid
158	2	Phospholipase A2
159	2	Kidney, Liver, Muscle
160	3	B-48
161	3	Malonyl-CoA
162	2	HMG-CoA
163	3	Acetyl CoA
164	4	Palmitoleic acid is the end product
165	3	Hexosaminidase A
166	4	HMP pathway
167	4	All of the above
168	1	Niemann - Pick disease
169	2	Thiokinase

170	4	All of the above
171	3	Iduronate Sulfatase
172	1	Apo A
173	4	Acetyl-CoA
174	3	Ceramide
175	1	Low or absence of HDL
176	3	Arachidonate
177	2	Over production of acetyl-CoA
178	1	Mitochondria
179	2	Transport of fatty acids from cytosol to mitochondria
180	1	G6PD deficiency
181	4	Arylsulfatase
182	4	g-Linolenic acid
183	2	Cerebroside
184	2	Propionyl CoA
185	2	RBC
186	3	Cholestasis
187	1	HDL increases oxidation of LDL
188	2	Linoleic acid
189	1	Triglycerides
190	4	Estradiol/estrogens
191	1	Chylomicron
192	3	Activation of hydrolase
193	4	Galactosyl ceramidase
194	3	Citrate

195	3	Chenodeoxycholic acid
196	3	HDL
197	3	Metachromatic leukodystrophy
198	1	Linoleic acid
199	3	Miochondria
200	3	NADH is Required - no; Major Product is - Palmitic acid; Occurs at a Glucagon-to-insulin Ratio Best Described as - low; Required Cofactors - Biotin and Coenzyme A
201	4	Docosahexaenoic Acid
202	1	Phytanic acid
203	1	Acetyl CoA
204	1	HDL
205	2	An inability of the lung to expand when taking in air
206	2	Fatty acid breakdown
207	3	Brain
208	2	Cholesterol
209	3	Type III hyperlipoproteinemia
210	1	Accumulation of very long chain fatty acids
211	1	VLDL
212	4	Beta hydroxy-beta methyglutaryl CoA
213	1	Liver
214	1	B- C-A- D - E
215	2	a-Linolenic acid
216	2	Chylomicrons
217	2	HMG CoA reductase

218	4	Acetoacetate
219	4	Arylsulfatase
220	3	HDL
221	4	All of the above
222	4	Wolman disease
223	3	Heparitin Sulphate
224	2	Hexosaminidase A
225	4	Malic enzyme
226	4	Krabbe's disease
227	1	Maple syrup urine disease
228	1	Cytosol
229	2	HDL
230	1	245
231	1	HDL
232	2	Carnitine transporter
233	3	Condensation reaction
234	2	HDL
235	3	Mg
236	1	Triacylglycerols
237	1	LDE-receptors
238	2	LCAT
239	4	Apoprotein E
240	2	Chylomicron
241	1	Apo AI
242	1	Ketone bodies

243	2	HMG CoA reductase
244	2	Type II A Hyperlipoproteinemia
245	4	Endoplasmic reticulum
246	2	Red blood cells
247	1	Glucocerebroside
248	1	Type I
249	2	Kidney
250	2	Arachidonic acid
251	1	Low or absence of HDL
252	2	Carnitine derivatives
253	2	Hormone sensitive lipase
254	4	Monoamine oxidase
255	2	Transpo of long chain fatty acid to mitochondrial inner layer
256	3	apo C-II
257	4	Apo-E
258	3	Very long chain fatty acids
259	1	Thiokinase
260	1	Phosphatidylinositol
261	3	Lanosterol
262	3	Gaucher's disease
263	1	Gaucher's disease
264	4	NADPH
265	2	Inner membrane of mitochondria
266	4	Hormone sensitive lipase

267	1	VLDL
268	1	Triglycerides
269	2	Linoleicacid
270	1	Sandhoff's disease
271	1	Isoleucine
272	2	Decrease fluidity of the lipid bilayer
273	2	Sunflower oil
274	1	Safflower oil
275	2	Glucagon
276	3	HDL
277	1	106
278	2	Beta galactocerebroside
279	3	Lp (a)
280	2	Apo C-II
281	3	HDL
282	1	Deficient LDL receptors
283	3	LDL
284	2	LDL
285	2	Insulin
286	4	All of the above
287	4	Omega-3 fatty acids
288	4	Liver
289	1	Niemann-Pick disease
290	2	Long chain fatty acid
291	3	Acety l CoA carboxylase

292	2	HDL
293	1	Plasminogen
294	1	Linoeic acid
295	4	Sphingosine
296	3	Litho Cholic acid
297	2	RBC
298	1	Carnitine derivatives
299	3	Nicotinic acid
300	1	HMG CoA reductase
301	3	Ketogenesis
302	4	Thyroxine
303	4	Fabry's disease
304	4	Docosahexaenoic acid
305	1	HMG CoA
306	1	PPP
307	4	Glycerol
308	2	Glyoxylate
309	3	LDL receptor
310	2	Endoplasmic reticulum
311	2	Sphingomyelin
312	4	Apo E
313	1	Type 2A Hyperlipoproteinemia
314	3	Cytosol
315	3	Starvation
316	1	Liver

317	2	Over production of acetyl-CoA
318	3	Ring B
319	3	VLDL
320	3	Spleen,Lung
321	1	Dipalmitovl phosphatidyl choline
322	1	Acetyl COA carboxylase
323	2	Acyl carnitine
324	1	Oleic
325	3	Globoside
326	1	Deficient LDL receptors
327	3	Type III hypolipoproteinemis
328	2	Smooth enoplasmic reticulum
329	2	Chylomicrons
330	2	Linoleic acid
331	4	Ubiquitin
332	2	Mitochondria
333	3	D9desaturase
334	3	Coconut oil
335	1	Cytosol
336	1	Antilipolytic
337	2	Cardiolipin
338	2	RBCs
339	2	LDL
340	2	Arginine
341	2	Phosphatidylserine

342	3	Both
343	4	NADPH2
344	3	None
345	2	Arginine
346	3	TCA cycle
347	1	Produce VLDL
348	2	Biotin
349	3	Reduction
350	1	Linoleic acid
351	2	Mitochondria
352	2	HMG-CoA reductase is active in phosphorylated form
353	3	Miochondria
354	2	Chylomicrons
355	4	Ganglioside
356	4	Ketone bodies in urine
357	4	LDL receptor
358	2	Sphingomyelinase
359	3	Me Ardle's Disease
360	3	Acetoacetic acid
361	2	Kidney
362	2	Liver
363	3	Palmitic acid
364	1	Free radical theory
365	3	Brain
366	1	H2O2

367	4	Hydrolysis of dietary and endogenous triglycerides
368	1	HDL
369	4	Thyroid hormone decreases the HMG-CoA reductase activity
370	3	Acetyl COA carboxylase
371	2	Transpo of fatty acids from cytosol to mitochandria
372	1	Pre-beta HDL
373	2	26
374	1	Phospholipids and sphingolipids
375	3	HMG - CoA
376	3	<3.5
377	3	HDL
378	1	Acetyl CoA
379	2	106
380	2	Albumin
381	3	HDL
382	4	Ketones
383	2	Liver
384	1	HMG CoA reductase
385	2	VLDL
386	1	Ubiquitin
387	1	Acetyl CoA
388	4	LDL receptor mutation
389	4	Amphipathic in nature
390	2	Chylomicrons

391	4	Brain
392	1	Chylomicrons
393	3	Floating LDL
394	4	Does not require CII as cofactor
395	3	7- hydroxycholesterol
396	4	LDL receptor mutation
397	1	HMP shunt
398	3	Compound lipids
399	3	Palmitic acid
400	1	HMG CoA
401	3	Increases activity of lipoprotein lipase
402	4	HDL
403	4	NADPH
404	1	245
405	3	Reabsorbed by enterohepatic circulation
406	1	Linoleic acid
407	2	Beta galactocerebrosidase
408	2	HPETE
409	2	Apoprotein B-100
410	1	Familial chylomicronemia syndrome
411	3	HDL
412	2	Linoleic acid
413	2	HMG CoA Synthase
414	3	Oleic acid
415	4	Acetyl-CoA

416	3	Linoleic acid
417	3	Apoprotein C-II inhibits lipoprotein lipase
418	4	Lipocortin
419	1	Dipalmitoyl phosphatidylcholine
420	1	Lecithin cholesterol acyltransferase
421	4	Sphingomyeline
422	4	Familial dysbetalipoproteinemia
423	4	Chylomicrons
424	1	HDL
425	3	LDL
426	4	Pyrimidines
427	1	beta-hydroxy-methyl glutaryl COA - Mevalonic acid
428	1	Beta-hexosaminidase
429	3	Ceramide
430	2	NADPH + H+
431	3	Dipalmitoyl lecithin
432	3	Lipogensis
433	3	Bile salts
434	4	Omega-3 fatty acid
435	1	Lysosome
436	1	Fat absorption
437	2	Cardiolipin
438	3	B-48
439	1	C - D-B - A
440	1	245

441	3	Beta hydroxy butyrate
442	3	RBCs
443	3	Both sides of plasma membrane
444	1	Collagen
445	3	Pantothenate
446	1	Steroids block production of all eicosanoids, whereas NSAIDs only block production of thromboxanes and prostaglandins.
447	2	LDL
448	4	HDL increased
449	1	Acetoacetate
450	4	Chylomicrons
451	4	Choline
452	4	Peroxisome
453	2	Fatty acid oxidation
454	3	Thiophorase is absent in liver
455	2	Sphinogomyelinase
456	1	Liver
457	3	Lipoprotein lipase
458	1	Peroxisomal biogenesis disorder
459	4	LDL
460	2	Use acyl CoA-thioesters
461	2	Cardiolipin
462	2	Elaidic acid
463	2	Cardiolipin
464	2	Acetyl CoA

465	3	Familial hyperalphalipoproteinemia
466	4	Apo A1
467	2	Triglycerides
468	1	Sphingomyelinase
469	1	Acetyl CoA
470	1	CNS
471	1	Palmitic acid
472	2	Iduronate Sulfhatase
473	3	Insulin
474	1	HDL increases oxidation of LDL
475	2	Liver
476	4	APOE4
477	1	Glucocerebrosidase
478	4	Fatty acid biosynthesis
479	1	Chylomicrons
480	2	LDL
481	1	Insulin
482	1	Hepatic mitochondria
483	3	HMG CoA reductase
484	3	Carnitine
485	3	Acetyl-CoA carboxylase
486	2	Iduronate sulfatase
487	1	Fatty acids
488	2	Esterification of cholesterol
489	2	Citrate

490	4	Hyaluronic acid
491	2	Required Cofactor - Biotin; Intracellular Location - Cytoplasmic; Allosteric Modifier - Citrate; Enzyme That Catalyzes a Covalent Modification - AMP-activated protein kinase
492	2	Triglycerides
493	3	Prolonged starvation
494	2	Type IIa
495	4	Niacin
496	2	Enzyme Glycerol kinase plays an important role
497	2	H2O2
498	1	Niemann pick disease
499	4	245
500	3	Pantothenate
501	3	10 g
502	1	Hydrogenation of oils
503	2	Malonyl CoA
504	4	Acid lipase
505	4	Phosphatidylcholine
506	2	Myristic and palmitic
507	2	Acetyl-CoA carboxylase
508	2	Palmitoleic acid
509	4	Increased activity of hormone sensitive lipase and decreased lipoprotein lipase activity
510	1	microsomal 7-a hydroxylase
511	1	Mitochondria
512	1	Removes cholesterol from extrahepatic tissues

513	4	Type V
514	2	Insulin
515	1	Chylomicrons
516	3	Choline
517	4	All of these
518	4	HDL
519	2	Sarcosine
520	4	Niemann Pick disease
521	3	Albumin
522	4	Thyroxine
523	1	Linoleic acid
524	1	Accumulation of phytanic acid
525	1	Increased concentration of sphingomyelin in liver
526	2	Eicosapentaenoic acid
527	3	Acetyl-CoA carboxylase
528	3	Dicarboxylic acid accumulation
529	3	Phosphatidylserine
530	3	B-100
531	4	The primary prostaglandin is PG H2
532	1	Niemann-Pick disease
533	4	Hydrogenation decreases TFA