

# Comparative Evaluation of Google, ChatGPT, and Perplexity for Medical Biochemistry Terminology Retrieval

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**Abstract:** *This study compares Google, ChatGPT, and Perplexity in retrieving definitions for selected medical biochemistry terminologies from the Pharm D curriculum. Thirty-five commonly used terms were searched on each platform, and the responses were compared for clarity, completeness, and educational usefulness. The retrieved definitions were also checked against standard biochemistry textbooks. The comparison indicated that all three platforms provided relevant information, although Perplexity generally offered more detailed responses with source-oriented presentation. The findings suggest that AI-assisted search platforms may support learning in medical education when used alongside standard academic references. Further studies using larger datasets and objective evaluation criteria recommended.*

**Keywords:** Medical Biochemistry, Artificial Intelligence, Search Engines, Perplexity, ChatGPT, Google Search, Medical Education, Information Retrieval

## 1. Introduction

A search engine is an online tool that helps users find information on the internet by crawling, indexing, and retrieving relevant webpages.

The first search engine ever created was Archie in 1990, developed by Alan Emtage, which could search file listings on early internet servers.

As the internet grew, new engines like Lycos, Yahoo, and AltaVista appeared, each improving speed and indexing.

In 1998, Google was founded by Larry Page and Sergey Brin, introducing the powerful PageRank algorithm, which changed the entire search experience.

Google evolved from a simple search engine into a vast ecosystem with Maps, Gmail, YouTube, Drive, and AI tools.

Its advantages include fast results, a huge database, and high accuracy, while disadvantages include ads and data privacy issues.

After 2020, search entered the AI era, bringing new tools that give direct answers instead of just links.

In 2022, Perplexity was launched by Aravind Srinivas as an AI answer engine providing concise, research-style responses with citations.

Perplexity's advantages are accuracy, direct answers, and transparent sources, though it may sometimes lack depth.

In the same year, ChatGPT was introduced by OpenAI, evolving from GPT-3 to GPT-5 as a powerful conversational AI.

ChatGPT is not a traditional search engine but can provide human-like explanations, summaries, writing, and reasoning.

Its strengths include creativity and clear explanations, while weaknesses include occasional errors and no real-time data without browsing.

Today, the most popular search engine in the world is Google, used by billions daily.

Perplexity is rising quickly due to its citation-based AI answers, and ChatGPT remains the most popular conversational AI.

Together, these tools show how search evolved from simple file lookup to intelligent, AI-Powered understanding.

We have followed a 3-step procedure in the first step.

We selected the basic medical terminologies of the subject named medical biochemistry of pharm D course, JNTHU University, Hyderabad.

We selected almost 40 basic medical definitions which includes like:

- 1) Cell
- 2) Cell Membrane
- 3) Biochemistry
- 4) Enzymes
- 5) Iso-Enzymes
- 6) Co-Enzymes
- 7) Cholesterol
- 8) Lipoproteins
- 9) Protein Levels in Serum
- 10) Nomenclature Of Cell
- 11) Nomenclature Of Enzyme
- 12) Glycolysis
- 13) Citric Acid Cycle
- 14) Disease
- 15) Diabetes Mellitus
- 16) Glycogen Storage Disease
- 17) Beta-Oxidation
- 18) Keto Genesis
- 19) Biological Oxidation
- 20) Electron Transport Chain
- 21) Amino acids

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- 22) Oxidative Phosphorylation
- 23) Urine Analysis
- 24) Urea Clearance
- 25) Diagnosis
- 26) Applications of Enzymes
- 27) Transamination
- 28) Carboxylation
- 29) DNA
- 30) RIA
- 31) Fatty Liver
- 32) Atherosclerosis
- 33) Glycogenolysis
- 34) Gluconeogenesis
- 35) Role of Liver

### 1) Cell

**Google:** The smallest self-sustaining structural and functional unit of living organisms that contains biomolecules and is capable of carrying out all essential life processes such as metabolism and growth and reproduction.

**ChatGPT:** The Smallest and structural and functional unit of life capable of performing all essential biochemical processes such as metabolism, energy production, synthesis of biomolecules and Reproduction.

**Perplexity:** In biochemistry, a cell is defined as the smallest, basic unit of life processes and serves as the structural, functional and biological building block of all living organisms.

### 2) Cell Membrane

**Google:** A cell membrane is a thin flexible layer that encloses the contents of a cell separating the interior from the out-side environment it is primarily composed of a phospholipid bilayer with embedded proteins and regulates the passage of substances into and out of the cell making it selectively permeable.

**ChatGPT:** The cell membrane is a thin flexible living boundary that surrounds the cell it controls the movements of substances into and out of the cell and helps maintain a stable internal environment.

**Perplexity:** The cell membrane also known as the plasma membrane is a thin semi permeable barrier that surrounds every living cell separating its interior from the external environment

### 3) Bio-Chemistry

**Google:** Biochemistry is the study of chemical processes within and relating to living organisms essentially the "chemistry of life "it combines biology and chemistry to understand the structure function and interactions of biomolecules like proteins carbohydrates lipids and nucleic acids and how these molecules drive life functions such as metabolism and heredity.

**ChatGPT:** Biochemistry is the branch of science that studies the chemical substances reactions and processes that occur inside living organisms it explains how biological molecular like proteins carbohydrates lipids nucleic acids enzymes hormones and others work together to sustain life.

**Perplexity:** biochemistry is the branch of science that studies the chemical substances reactions and processes that occur in living organisms it links biology and chemistry by explaining how biomolecules such as proteins carbohydrates lipids and nucleic acids enable life processes like metabolism growth and reproduction.

### 4) Enzymes

**Google:** Enzymes or biological catalyst usually proteins, sometimes RNA molecules in living organisms without being consumed or permanently.

**ChatGPT:** Enzymes catalyst essential biochemical reactions that sustain life including digestion, energy production and biosynthesis of cellular components.

**Perplexity:** Enzymes are biocatalyst present in cells that speed up biochemical reactions without getting itself destroyed in the reaction.

### 5) ISO-Enzymes

**Google:** A co-enzyme is a small non-protein organic molecule that works with enzymes catalyse biochemical reactions by acting as a temporary carrier for chemical groups, electrons or atoms. They are essential for enzyme activity.

**ChatGPT:** Co-enzymes are non- protein organic molecules that bind with enzymes &help them carry out biochemical reactions. they act as helpers, transferring electrons, atoms or small molecules from one reaction to another. Co-enzymes are often derived from vitamins.

**Perplexity:** Isoenzymes is a group of enzymes that catalyst the same reaction but have different enzymes forms and catalytic efficiencies.

### 6) Co-Enzymes

**Google:** A co-enzyme is a small non-protein organic molecule that works with enzymes catalyse biochemical reactions by acting as a temporary carrier for chemical groups, electrons or atoms. They are essential for enzyme activity.

**ChatGPT:** Co-enzymes are non- protein organic molecules that bind with enzymes &help them carry out biochemical reactions. they act as helpers, transferring electrons, atoms or small molecules from one reaction to another. co-enzymes are often derived from vitamins.

**Perplexity:** A co-enzyme is an organic, non-protein compound that binds with an enzyme to help catalyse a biochemical reaction. coenzymes cannot function alone &must be paired with an enzyme to be active, it forms a holoenzyme, which is the active form capable of catalysing reaction.

### 7) Cholesterol

**Google:** Cholesterol is a waxy fat-like substance that your body needs to build healthy cells, make hormones, and produce vitamin D.

**ChatGPT:** Cholesterol is a waxy, fat-like lipid found in all body cells and blood. It is essential for cell membrane structure, hormone production, and synthesis of vitamin D and bile acids.

**Perplexity:** Cholesterol is a waxy, fat-like substance made by the liver and found in all cells of the body. It is essential for making cell walls, hormones, vitamin D, and bile acids. The body needs cholesterol for good health, but too much can increase the risk of heart diseases.

### 8) Lipoproteins

**Google:** A lipoprotein is a complex particle made of lipids (fats) and protein that transports cholesterol, triglycerides, and other fats throughout the body in the bloodstream.

**ChatGPT:** Lipoproteins are complexes of lipids and proteins that transport cholesterol and triglycerides through the blood to different tissues of the body.

**Perplexity:** Lipoproteins are small particles made of fats and proteins that carry cholesterol through the blood. They help transport fats to and from cells, keeping fats soluble in the watery bloodstream.

### 9) Protein Levels in Serum

**Google:** The total concentration of proteins in blood serum, which is the fluid part of blood after blood has clotted and the fibrinogen has been removed.

**ChatGPT:** Protein levels in serum refer to the total amount of proteins present in the liquid portion of blood (serum). These proteins mainly include albumin and globulins, which play important role in maintain osmotic balance, immunity, transport and many metabolic functions.

**Perplexity:** The concentration of protein present in the serum portion of blood, measured as a part of clinical chemistry analysis.

### 10) Nomenclature of Cell

**Google:** Follows a system of using a common name a systematic name and unique EC number assigned by the international union of biochemistry and molecular biology.

**ChatGPT:** The nomenclature of enzymes refers to the systematic method of naming enzymes based on the type of reaction they catalyse. This system is standardized by the international union of biochemistry and molecular biology (IUBMB).

**Perplexity:** Enzyme nomenclature is the system used to name enzyme based mainly on the reaction they catalyse and often the substrate they act on following rules set by the international union of biochemistry and molecular biology end with the suffix "ase".

### 11) Nomenclature of Enzyme

**Google:** The nomenclature of cell can refer to two different topics the etymology of the word "cell" Or the naming conventions for cell lines the word cell comes from the Latin meaning small room.

**ChatGPT:** Nomenclature of the cell means the systematic way of naming and classifying cells or cell types so that each one has a clear standardizes and universally understood name it aims to avoid confusion by using agreed rules ontologies to describe cell types based on features like origin, structure, markers and function.

**Perplexity:** Nomenclature of a cell refers to the systematic naming and classification of the parts, structures, and components of a cell so that scientists can clearly describe and communicate about cellular features.

### 12) Glycolysis

**Google:** Glycolysis is the process where a glucose molecule is broken down into two molecules of pyruvate Generating a small amount of energy in the form of ATP.

**ChatGPT:** Glycolysis is the process in which glucose is Broken down into pyruvate to release energy (ATP) in the cytoplasm.

**Perplexity:** Glycolysis is the enzymatic process by which glucose is Broken down in cells to produce energy, Resulting in end products such as pyruvate, ATP, NADH, and water.

### 13) Citric-Acid Cycle

**Google:** The citric acid cycle is the process in which acetyl-COA is Broken down in the Mitochondria to produce energy rich molecules [ATP, NADH, FADH<sub>2</sub>].

**ChatGPT:** It is a series of chemical reaction in the Mitochondria that converts Acetyl-COA into carbon dioxide to produce energy carriers for the cell.

**Perplexity:** The citric acid cycle also known as the Krebs's cycle or TCA cycle, is a series of enzyme -Catalysed chemical reactions in the Mitochondria That completely oxidises Acetyl- COA to carbon dioxide, producing energy -rich molecules like NADH and FADH<sub>2</sub> for ATP Generation.

### 14) Disease

**Google:** Diagnosis is the process of identifying the nature and cause of something, most a commonly a disease or problems, by examining symptoms and other evidence.

**ChatGPT:** Diagnosis generally means identifying the nature or cause of a problem. A medical diagnosis is the process of identifying, determining which disease or condition explains a patient's symptoms and signs.

**Perplexity:** Diagnosis is the process of identifying a disease, condition, or problem based on its signs, symptoms, and the results of various diagnostic tests. Diagnosis is essential for guiding appropriate treatment and management of a condition.

### 15) Diabetes Mellitus

**Google:** Diabetes mellitus is a chronic metabolic disease characterized by high blood glucose levels, which occurs because the pancreas doesn't produce enough insulin or the body cannot effectively use the insulin it produces.

**ChatGPT:** Diabetes mellitus is a chronic metabolic disorder characterized by high blood glucose levels which means hyperglycaemia due to defects in insulin secretion, insulin action, or both.

**Perplexity:** Diabetes mellitus is a chronic endocrine disorder characterized by high blood glucose or sugar levels due to issues with insulin production, insulin action or both. The two most common types 1. Where the body cannot produce insulin and type 2. Where the body becomes resistant to insulin or does not produce enough insulin.

### 16) Glycogen Storage Disease

**Google:** A glycogen storage disease is a metabolic disorder caused by deficiency of an enzyme or transport proteins affecting glycogen synthesis, glycogen breakdown or glucose breakdown typically in muscles and or liver cells. GSD has two classes of cause; they are genetic and environmental.

**ChatGPT:** Glycogen storage disease is a group of inherited metabolic disorders caused by deficiency of enzymes involved in glycogen synthesis or breakdown leading to abnormal storage of glycogen In tissue like liver and muscles.

**Perplexity:** Glycogen storage disease GSD refers to a group of rare inherited metabolic disorders caused by deficiency in the enzymes needed to process glycogen resulting in improper storage or breakdown of glycogen in the body.

### 17) Beta-Oxidation

**Google:** Beta oxidation is the catabolic process by which fatty acids molecules are broken down in the cytosol in prokaryotes and in the mitochondria in eukaryotes to generate acetyl COA.

**ChatGPT:** Beta oxidation is the metabolic process by which fatty acids are broken down in the mitochondria to produce acetyl COA, NADH and FADH<sub>2</sub>.

**Perplexity:** Beta oxidation is the main pathway by which fatty acids are broken down to produce energy in cells especially in mitochondria.

### 18) Keto Genesis

**Google:** Production of ketone bodies during the metabolism of fats. Which provide an alternative form of energy for the body.

**ChatGPT:** Ketogenesis is the metabolic process by which the liver produces ketone bodies primarily acetoacetate beta hydroxybutyrate and acetone from fatty acids when glucose availability is low.

**Perplexity:** Ketogenesis is a metabolic pathway that produces ketone bodies for energy by breaking down fatty acids and ketogenic amino acids.

### 19) Biological Oxidation

**Google:** Biological oxidation is the process by which living organism release energy from food molecules like carbohydrates and fats through a series of redox reactions.

**ChatGPT:** Biological oxidation is the process by which living organisms release energy from nutrients by transferring electrons (or hydrogen atoms) to oxygen or other electron-accepting to oxygen or other electron-accepting molecules.

**Perplexity:** Biological Oxidation is the process in living organism where electrons are transferred from reduced co-enzymes (such as NADH and FADH<sub>2</sub>) through the respiratory chain to oxygen, leading to the release of energy that is captured as ATP, the cell's energy currency

### 20) Electron Transport Chain

**Google:** The electron transport chain is a series of protein complexes embedded in a membrane that uses the energy from electrons to create a proton gradient across the membrane.

**ChatGPT:** The electron transport chain is a series of protein complexes and molecules located in the inner mitochondrial membrane (in eukaryotes) or the cell membrane (in prokaryotes) that transfer electron from electron carriers (like NADH and FADH<sub>2</sub>) to oxygen through a sequence of redox reactions.

**Perplexity:** The electron transport chain is series of membrane bound protein complexes and mobile electron carriers that passes electrons from reduced electron donors (such as NADH and FADH<sub>2</sub>) to a final electron acceptor through sequential redox (oxidation-reduction) reactions, and use the released energy to pump protons across a membrane to generate electrochemical gradient that drives ATP synthesis by oxidative phosphorylation.

### 21) Amino Acids

**Google:** Amino acid are organic molecules that are the building blocks of Proteins, consisting of a central carbon atom bounded to an amino-group (NH<sub>3</sub>) a carboxyl group (-COOH), a hydrogen atom, & a unique side chain (-R-group).

**ChatGPT:** An Amino acid the basic building block of proteins It is An organic molecule that contains. It's Amino group (-NH<sub>2</sub>) Carboxy) group (-COOH) Aside chain (R-group) that makes fat amino acid different Amino acid join together to form proteins, which are essential for body-functions like growth, repair-enzyme activity & hormone productive.

**Perplexity:** Amino acids typically consist of a (typical) Central (alpha). Carbon bonded to an amino acid group, a carbonyl group a hydrogen atom & a variable side Chain (R-group) that determines the amino acids specific properties in proteins, about 20 Standard amino acids are linked together by peptide bonds to form polypeptide chains which then fold into Functional three-dimensional structures.

### 22) Oxidative Phosphorylation

**Google:** It is the metabolism pathway where cells generate a large amount of ATP by using energy from the oxidation of nutrients through an Electron transport chain.

**ChatGPT:** Oxidative phosphorylation is the final stage of cellular respiration in which electrons from NADH & FADH<sub>2</sub>, pass through a series of protein complexes (the Electron transport chain) and the released energy is used to

pump protons & Create & Electro chemical gradient ATP synthase then uses this proton gradient to convert ADP & Inorganic Phosphate into ATP, making oxidative phosphorylation the major source of ATP in aerobic cells.

**Perplexity:** Oxidative phosphorylation is the process in cells where ATP-(energy) is produced using electron transport chain (ETC) & oxygen (as the final electron acceptor), Chemiosmosis (movement of H<sup>+</sup> ions through ATP Synthase). This process happens in the inner mitochondrial membrane & is the main source of ATP in aerobic organisms.

### 23) Urine Analysis

**Google:** Urine analysis (urinalysis) is a comprehensive set of physical, chemical, and microscopic tests used to examine the composition of urine.

**ChatGPT:** Urine analysis (urinalysis) is a diagnostic test that examines the physical, chemical, and microscopic characteristics of urine to detect diseases.

**Perplexity:** Urine analysis (urinalysis) is the physical, chemical, and microscopic examination of urine to detect and measure substances or abnormalities that help diagnose disease.

### 24) Urea Clearance Test

**Google:** The urea clearance test measures how efficiently the kidneys remove urea from the blood to assess renal function.

**ChatGPT:** Urea clearance test is a kidney function test that measures how effectively the kidneys remove urea from the blood and excrete it in the urine.

**Perplexity:** The urea clearance test is a medical examination that measures how efficiently the kidneys remove urea from the blood using both blood and 24-hour urine samples.

### 25) Diagnosis

**Google:** Diagnosis is the process of identifying the nature and cause of something, most commonly a disease or problems, by examining symptoms and other evidence. In a medical context, it involves a doctor evaluating a patient's symptoms, medical history, and test results to determine the specific condition.

**ChatGPT:** Diagnosis generally means identifying the nature or cause of a problem. A medical diagnosis is the process of identifying, determining which disease or condition explains a patient's symptoms and signs.

**Perplexity:** Diagnosis is the process of identifying a disease, condition, or problem based on its signs, symptoms, and the results of various diagnostic tests. Diagnosis is essential for guiding appropriate treatment and management of a condition.

### 26) Applications of Enzymes

**Google:** Enzymes have diverse applications in various industries, including the food industry for processing and quality improvement, the detergent industry for stain removal, the textile industry for fabric finishing.

**ChatGPT:** Enzymes are biological catalysts that speed up chemical reactions. Because of the specificity and efficiency, they are widely used in many fields.

**Perplexity:** Enzymes are biology catalysts used in many fields such as medicine, industry, agriculture, and research to speed up specific chemical reactions without being consumed. The medical field for diagnostics and therapies, they are also used in biotechnology for molecular biology experiments, in the paper and pulp industry and in the production of biofuels and other industrial products.

### 27) Transamination

**Google:** Transamination is the process of transferring an amino group (-NH<sub>2</sub>) from an amino acid to a keto acid, creating a new amino acid & a new keto acid.

**ChatGPT:** Transamination is a biochemical reaction in which an amino group (-NH<sub>2</sub>) is transferred from an amino acid to a keto acid forming a new amino acid & a new keto acid.

**Perplexity:** Transamination is a biochemical process in which an amino group is transferred from one amino acid to the keto group of keto acid.

### 28) Carboxylation

**Google:** It is a chemical reaction that removes a carboxyl group (-COOH) from a molecule and releases carbon dioxide (CO<sub>2</sub>). These processes are important for the metabolism & synthesis of amino acids as well as for neurotransmitters.

**ChatGPT:** Decarboxylation is a biochemical reaction in which a carboxyl group (-COOH) is removed from a molecule as carbon dioxide (CO<sub>2</sub>).

**Perplexity:** Decarboxylation is a chemical reaction that removes a carboxyl group (-COOH) from an organic molecule, releasing carbon dioxide (CO<sub>2</sub>) in the process.

### 29) DNA

**Google:** Deoxyribonucleic acid is the molecule that carries the genetic instructions for the development, functioning and reproduction of all living organisms.

**ChatGPT:** Deoxyribonucleic acid is the hereditary material found in all living organisms. It carries the genetic instructions that determine how an organism grows, functions, and reproduces. DNA is made up of long chains of molecules called nucleotides arranged in a double helix structure (like a twisted ladder). These nucleotides contain the genetic code that is passed from parents to offspring.

**Perplexity:** Deoxyribonucleic acid is the hereditary material in almost all living organisms that carries the instructions for growth, development, and functioning of the body. It is the main chemical that stores and passes genetic information from parents to offspring.

### 30) RIA

**Google:** RIA or Radio immune assay is a highly sensitive biochemical technique that uses radioactive isotopes and

antigen-antibody reactions to measure the concentration of substances like hormones, drugs, and antigens in a sample.

**ChatGPT:** RIA is a highly sensitive laboratory technique used to measure very small concentrations of biological molecules- such as hormones, drugs, enzymes, and antibodies- in blood or other samples.

**Perplexity:** RIA stands for Radioimmunoassay. It is a highly sensitive laboratory technique used to measure the concentration of antigens, hormones, drugs, or specific proteins in biological samples like blood or urine through the use of radio labelled molecules and antibodies in an immune complex reaction.

### 31) Fatty Liver

**Google:** Fatty liver (hepatic steatosis) is a common condition where excess fat builds up in liver cells, often making up over 5-10% of the liver's weight, which can impair function and lead to inflammation (steatohepatitis, or MASH/ NASH) and scarring (cirrhosis).

**ChatGPT:** Fatty liver is a condition in which too much fat (mainly triglycerides) accumulates in liver cells. Normally, a small amount of fat in the liver is normal, but when fat makes up more than 5% of the liver's weight, it is considered a fatty liver.

**Perplexity:** Fatty liver disease is a condition characterized by excessive fat accumulation in liver cells, typically exceeding 5-10% of the liver's weight.

### 32) Atherosclerosis

**Google:** Atherosclerosis is the buildup of fats, cholesterol and other substances in and on the artery walls. This buildup is called plaque. The plaque can cause arteries to narrow, blocking blood flow. The plaque also can burst, leading to a blood clot.

**ChatGPT:** Atherosclerosis is a chronic disease in which fat, cholesterol, inflammatory cells, and other substance buildup inside the walls of arteries, forming plaque. these plaques cause the arteries to narrow, stiffen and lose elasticity reducing blood flow.

**Perplexity:** Atherosclerosis is a chronic inflammatory disease where plaque-made of fat, cholesterol, calcium and other substances builds up inside artery walls, causing narrowing, hardening, and reduced blood flow.

### 33) Glycogenolysis

**Google:** Glycogenolysis is the biochemical process of breaking down stored carbohydrate glycogen into glucose when the body needs energy.

**ChatGPT:** It is the biochemical process where glycogen is broken down into glucose to provide energy.

**Perplexity:** Glycogenolysis is the biochemical process of breaking down stored glycogen into glucose (mainly as glucose – 1 – phosphate) in liver and muscle cells to maintain blood glucose levels.

### 34) Gluconeogenesis

**Google:** Gluconeogenesis synthesizes glucose from non-carbohydrate precursors like lactate, pyruvate, glycerol and certain amino acids.

**ChatGPT:** It is the metabolic process where glucose is synthesized from lactate, amino acids, and glycerol mainly in liver and partly in kidneys.

**Perplexity:** Gluconeogenesis is the metabolic pathway that forms glucose from non-carbohydrate substances like lactate, amino acids (alanine, glutamine), glycerol, and pyruvate – mainly in the liver and partly in kidneys.

### 35) Role of Liver

**Google:** The liver acts as a metabolic hub, processing carbohydrates, fats, proteins and detoxifying harmful substances.

**ChatGPT:** The liver performs metabolism of carbohydrates, proteins, lipids, detoxification, synthesis of plasma proteins, bile production and storage of vitamins & minerals.

**Perplexity:** The liver is a critical organ responsible for metabolic, detoxifying, storage, and synthetic functions essential for homeostasis.

We made use of search engines like Google, ChatGPT, perplexity. Every medical terminology definition was searched in all the three search engine platforms we have got the best definitions from it we also cross checked the definitions with text books like U Satyanarayana bio chemistry.

We have analyzed in detail each and every word of the three search engines, we have noticed a clear remarkable difference exist between all the three search engines.

## 2. Conclusion

After analysing the terminologies from the search engines like Google, ChatGPT and perplexity, we have noticed that the basic medical terminology definitions of subject Medicinal Biochemistry Pharm D course JNTHU Hyderabad University were accurately elaborate definitions were given by PERPLEXITY search Engine when compared to Google and ChatGPT. We finally suggest to go for perplexity search engine app to all the medical students because we have found accurate as well as elaborate data in the perplexity search engine.