

- 1. Please explain the value and reason for doing your own work and not copying or taking answers from another source and claiming them as your own.**

In doing my own work I am expanding my knowledge in crucial areas that will be needed to be a successful provider.

- 2. Use the John Jones case study to answer the following question. Using diagnostic criteria for diabetes, what is John's diabetic status? What treatment plan should be introduced at this time?**

According to the diagnostic criteria provided by Rosenthal and Burchum (2021), the four criteria to diagnose DM include:

- Fasting plasma glucose ≥ 126 mg/dL OR
- Random plasma glucose ≥ 200 mg/dL plus symptoms of diabetes OR
- Oral glucose tolerance test (OGTT): 2-h plasma glucose ≥ 200 mg/dL OR
- Hemoglobin A1c 6.5% or higher;

Due to Mr. Jones' lab results, Hemoglobin A1c of 8.1%, it would be acceptable to diagnose Mr. Jones with DM and initiation of pharmacological treatment, such as Metformin, should be started.

Reference:

Rosenthal, L., Burchum, J. (2021). *Lehne's pharmacotherapeutics for advanced practice nurses and physician assistants* (2nd ed.). Elsevier Health Sciences.

- 3. Use the John Jones case study to answer the following question. Which of John's behaviors should be addressed to encourage lifestyle changes and decrease A1C levels?**

Mr. Jones has a recorded BP of 130/90, weight of 235 pounds, with current diagnoses of hyperlipidemia and obesity. Mr. Jones also reports having a very sedentary lifestyle of sitting for 8-10+ hours a day, without a regular exercise regimen. Mr. Jones also reported that his diet consists of mostly fast-food with sweet tea every meal, in addition to 3-4 cups of coffee daily.

Mr. Jones should participate in dietary changes as well as introducing a moderate amount of physical activity into his lifestyle to decrease the risks and improve the outcomes of his Type 2 DM diagnosis (Rosenthal and Burchum, 2021).

Reference:

Rosenthal, L., Burchum, J. (2021). *Lehne's pharmacotherapeutics for advanced practice nurses and physician assistants* (2nd ed.). Elsevier Health Sciences.

- 4. Use the John Jones case study to answer the following question. Which behavior in John's social history poses a potential concern with first line pharmacological treatment for diabetes and why?**

According to ADA Standards of Medical Care in Diabetes (2020), Metformin is the first line of defense in patients with a Hemoglobin A1C $>6.5\%$. Mr. Jones reports "having a few beers on the weekend during football season." Metformin is contraindicated in alcoholics as it increases the risk of lactic acidosis. While it does not appear that Mr. Jones is suffering from alcoholism, further questioning is needed, in