Here is an introduction to Glucoferrin® metabolic possibilities:

- 1. Glucose Tolerance Factor.
- 2. Iron binding glycoprotein, iron sequestering protein
- 3. Iron, metals and chemicals chelator.
- 4. Red Blood Cells and hemoglobin formation support.
- 5. 708 sulfur bonded amino acids sequence
- 6. Liver functions support.

Glucoferrin® plays a vital role in aiding and supporting the creation of red blood cells and hemoglobin. It supplies the essential amino acids required to form the helical structure of red blood cells and the hemoglobin they contain. The alpha chain comprises 141 amino acids, while the beta chain has 146, resulting in a total of 574 amino acids in a single hemoglobin molecule. Heme iron is crucial for forming red blood cells, which gives these cells and the blood their red color due to iron content. Once red cells form in the bone marrow, Glucoferrin® facilitates the transfer of heme iron ions from the bloodstream into the red cells. This capability enhances the delivery of glycogen, oxygen, sulfur, and nitric oxide throughout the body. Simultaneously, within the red blood cells, Glucoferrin® supports the creation of globin proteins. After this process, Glucoferrin® releases a sequence of amino acids that acts as a bridge, linking iron with globin to form hemoglobin, thus earning its status as an iron-binding and sequestering glycoprotein.

In humans, there are four types of hemoglobin. One of them, HbA1C, is glycated hemoglobin attached to glucose and is used to monitor long-term blood glucose levels. Hemoglobin is produced and replaced in cycles of about 120 days. Glucoferrin® helps ensure that only the necessary amount of iron and globin enter the red cells, preventing excess.

The human body of an average adult comprises approximately 20 to 30 trillion red blood cells. When there is excess iron in the bloodstream, it is referred to as free iron. This excess can accumulate in organs, leading to dysfunction and potentially causing organ failure over time. All organs and skeletal muscles are adversely affected by this iron build-up. Iron regulation issues can result in a reduction of muscle density, size, and strength, which is linked to the idea of an "iron man." Proper iron transfer into cells is associated with strength, while iron left outside cells results in weakness.

Iron is primarily stored in the liver and bone marrow. Ferritin proteins, composed of 349 amino acids, are responsible for temporary iron storage and protecting against iron overload. The transport of iron is managed by transferrin proteins, which are made up of 678 amino acids. Hemoglobin plays a crucial role not only in moving glucose and oxygen into the cells but also in removing carbon dioxide (CO2) and oxygen (O2) from the body, which are then exhaled. Elevated levels of CO2 can be a significant factor in increased blood pressure levels.

Glucoferrin® offers an unparalleled combination to enhance the glucose tolerance factor (GTF). GTF is the key complex in boosting insulin sensitivity and reducing insulin resistance, thereby optimizing the body's nutritional delivery system. Initially stored in the liver, GTF extends its presence to other organs, muscles, and ultimately, bone marrow.

With regular Glucoferrin® intake, perfect homeostasis of GTF within the human body can be achieved in approximately seven years - a feat not accomplished by any other formula. Glucoferrin® contains a unique synergistic sulfur-based sequence of 708 amino acids. Daily consumption promotes "limitless multiplication" of amino acids, safeguarding the body against amino acid deficiency.

Based on data from CSHS, there are more than 400 types of anemia. Remarkably, Glucoferrin® is the only GTF complex with the unmatched capability to regulate iron homeostasis, addressing multiple forms of anemias, with iron deficiency and without iron deficiency, and managing conditions like Hemochromatosis and Ferroptosis – an iron overload-induced, accelerated cell death.

Additionally, Glucoferrin® supports liver health by contributing to the production of glutathione, the body's master antioxidant. This aids in various cellular processes, including detoxification and immune function, thereby maintaining overall cellular health. The liver, crucial for synthesizing and regulating glutathione levels, benefits significantly from the nutrients supplied by Glucoferrin®.

"Our focus with Glucoferrin® has been to support and enhance the body's natural iron and glucose metabolism processes while combating insulin resistance. By doing so, we're not just contributing to immediate health benefits but also aiding in preventing long-term metabolic health issues"

please visit: Glucoferrin.com, Facebook.com/glucoferrin, metabolismIQ.com

Piotr S. & Kristy Henderson, PharmD Phoenix Creative Nutraceuticals