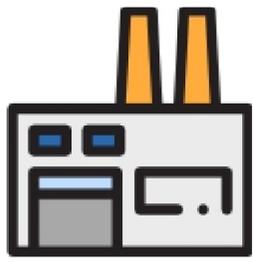
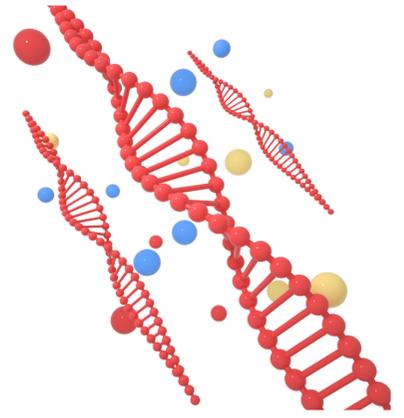


Biomedicine - Solution

In addition to solid materials such as metals, polymers, and ceramics, solutions are also an important field that cannot be ignored in biomedicine.

The **concentration** of solution can not only related to the **osmotic pressure** of the liquid, but also a criterion for determining **quality**. And the criterion for determining whether biomedical materials are **fused** with the human body is called **biocompatibility**; means **the higher the compatibility, the less repellent to the human body is**, with today's technology, some of them can even be integrated, decomposed, and digested.

It is commonly used to measure blood, urine, collagen solution, cosmetic fillers, copper sulfate solution, and physiological saline.



Concentration & Quality

The physiological saline (Normal saline) in the biomedical solution is widely used for general washing and internal injection. And it can be subdivided into 3 categories, **high, medium, and low concentration solutions**, which have completely different functions and should not be mixed.

Example 1: Infusion of physiological saline

If a **high-concentration liquid** is injected into the body, the **osmotic pressure** of the cells in the body will be lower than the osmotic pressure of the extracellular solution. At this time, the intracellular fluid will leak out, causing the cells to gradually become **dehydrated and finally dehydrated**.

Conversely, when the cells are placed in a **low-osmotic solution**, the cells will **gradually swell** due to the ingress of water, and eventually **may even rupture**.

Infusion of physiological saline with too high or too low concentration as a base fluid into the human body will seriously endanger the life of the patient.

Example 2: Wash with physiological saline

If the nasal cavity is rinsed with physiological saline that is **too low in concentration**, since the nasal cavity is not protected by cuticula, the nasal mucosa tissue fluid will absorb too much water from the rinse solution when it passes through. Penetrate into the nasal cavity mucosa and **cause mucosal edema**, which in turn leads to nasal and **throat mucosal edema, injuries** and even bleeding problems.

International Standard

MatsuHaku biomedical density tester uses **Archimedes buoyancy method** to quickly detect samples. Refer to the international standard **GB/T611/T5009/T13531/T22230/T24232**, and match the volume of the irregular weight as the inspection standard of the sample.

**The first condition to consolidate quality is to thoroughly explore the overall density.**

Testing Steps:

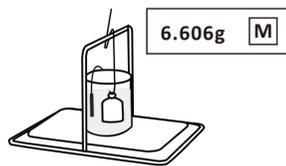
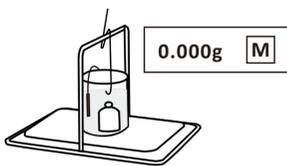
Re-zero the weight



Hook the testing weight



Results:



LID 1	
Temp :	25.0 °C
SG :	0.9852
Conc.1 :	89.7 %
Conc.2 :	10.3 %

MatsuHaku Density Tester  
Keep You Aware Of

1. **Reduce** the cost and the **Defect** loss
2. Fit the international **Standard**
3. Make sure the quality **Stable**



With MatsuHaku Density Tester  
Quality control is more easier than you thought