What is Nutrition? How is it different from Diet?

Nutrition refers to the **quality of the food you consume**. It is the process of utilizing food for growth, metabolism and repair of tissues. Diet refers to the **total amount of food** consumed by individuals.

Diet and nutrition is a 2 way process. Your health status can be affected by nutrient deficiency and vice versa. Nutrients are divided into two categories: **macronutrients** consisting of proteins, carbohydrates and fat; and **micronutrients** consisting of vitamins and minerals.

The food we give our bodies can help it to function, survive and thrive or it can contribute towards towards disease and unfavorable conditions in the body.

This also includes water intake. Most people don't drink enough water. Water is vital for so many functions of the body.

A micronutrient-dense, high-fiber diet with sufficient water intake and high-quality protein, along with avoidance of saturated and trans-fat, sugars, refined flours, high-fructose corn syrup, and processed foods, is believed to have a protective effect on the gut.

**Exercise** is beneficial for so many things including managing weight, preventing disease, building muscle, strength, flexibility, keeping our heart strong and our bodies and minds working effectively,liver function, digestive function and metabolism as well as brain activity.

It has a role in the immune function.

A Lack of exercise is known to be a leading contributing factor towards such things as obesity, heart diseases, high blood preassure, depression, stress, and many more conditions.

Load bearing exercises (using weights) are vital especially as we age. We start to lose collagen from the age of 25.

Collagen is what makes our joints strong and protects our bones.

Weight lifting or resistance training is vital as we age to build bone strength,collagen and keep joints subtle. Without strong bones we run the risk of breakages and disease like osteoporosis.

Sleep is as necessary as water and food.

When we sleep the body reduces movement and heart activity, reduces responses to external stimuli and reduces breathing rate.

When we don't sleep enough, we age faster, have poorer brain function like slow thinking, reduced attention span, fatigue, poor decision making and poor memory.

The center for disease control and prevention recommends at least **7-9 hours per night.** 

Adequate sleep can improve hormone function, regulate the appetite and metabolism and how the body responds to stress.

There is a strong link to inadequate sleep and high blood pressure, being overweight, type 2 diabetes, and mental health and cognition problems.

It is well known that it is stress of some kind that activates the celiac genes.

Short term cortisol is beneficial because it can increase metabolism, reduce inflammation, control blood sugar, improve memory and contributes to the fight or flight response of the autonomic nervous system.

But when it is activated long term, when it doesn't switch off, then this negative feed back loop can weaken the immune system, increase blood pressure and contribute to the development of chronic health problems like cell damage, immune dysfunction, nerve and digestive issues and others.

It is important to find ways to cope with stress and manage it. Doing things you enjoy and that relax you is important and is an important part of staying healthy.

Stress can lead to many health problems if not properly managed.