Zinc is essential to good health. Dozens of zinc dependent enzymes participate in a myriad of health defining metabolic functions. Classic signs of zinc deficiency include:

- **Severe Deficiency** - Delayed healing of ulcers, neurosensory disorders, infections due to immune dysfunction, weight loss, skin inflammation, baldness, diarrhea, sexual underdevelopment in males, and emotional disorders.

- **Moderate Deficiency** - Growth retardation, delayed wound healing, neurosensory changes, immune dysfunction, rough skin, poor appetite, mental lethargy and sexual underdevelopment in males.

- **Mild Deficiency** - Decreased muscle mass, neurosensory changes, inability to react, sluggishness, decreased immune system functions, and decreased sperm count and testosterone in males.

Zinc is also necessary for healthy mental function and mood, protein synthesis, nucleic acid and DNA metabolism, hormone production, prostate function, energy, response to stress and taste acuity.

Zinc assessment is very important. Studies show that even a mild deficiency of zinc adversely affects clinical biochemical and immunological functions. Reports indicate that in the US marginal zinc deficiency is widespread. One study of over 15,000 people revealed that almost 70% were not consuming zinc at the RDA levels.

The initial symptoms of marginal zinc deficiency are dysfunctions of taste and smell. Studies have found that taste sensitivity may be a good indicator of the functional availability for zinc in the body and have led to the development of the zinc taste test.

**Instructions:** Place a small amount of Aqueous Zinc™ solution in the mouth (~10mLs) and hold for 30 sec. Describe your initial taste according to the following categories (for accurate results, refrain from eating, drinking or smoking for at least one half hour prior to the test).

- **Response 1:** No specific taste or other sensation is noticed after the solution has been held in the mouth for up to 30 seconds.
- **Response 2:** No immediate taste is noted, however, after a few seconds a slight taste develops, variously described as “dry”, “mineral”, “furry”, “sweet”.
- **Response 3:** Definite, though not strongly unpleasant taste is noted almost immediately and tends to intensify with time.
- **Response 4:** A strong unpleasant taste is noted almost immediately.

**Key**

- **Response 1:** Strongly suggests zinc deficiency and favorable response to zinc supplementation
- **Response 2:** Suggests zinc deficiency and favorable response to zinc supplementation
- **Response 3:** Suggests zinc is likely inadequate with need for zinc supplementation
- **Response 4:** Suggests zinc is adequate with no need for zinc supplementation.