Zinc and the body

What is the role of zinc in the body?
Facts about Zinc

- **Dietary Zinc** is **ABSOLUTELY essential** for our body.

- **In order to maintain a healthy body**, then one must consume the recommended amount. The RDA for adult males is 11mg/day and 8mg/day for females.

- **If pregnant** it is recommended that one should take 11mg/day to provide for the growing fetus, and 12mg/day during lactation.
Function of Zinc on the body

- The body contains 1.5-2.5 grams of zinc
- It is a component of every living cell
- It is best known for its participation in enzyme structure and function.
Excellent for

- Cell replication
- Fertility and reproduction
- Hormone activity
- Sexual maturation
- Night vision
- Immune function
- Cell growth
- Gene expression
- Protein metabolism
- Hemoglobin activity
Major sources of zinc

- Protein, especially red meat, sea food, clams
- Oysters, cooked
- Wheat-bran flakes cereal
- Beef liver, cooked
- Dark meat turkey
- Plain, non-fat yogurt
- Refined canned beans
- All Bran cereal
Zinc Deficiency

- Scientists first recognized human zinc deficiency in 1961.
- Found among young, severely growth retarded Iranian men.
- The men were also anemic and lethargic and had hypogonadism (poorly developed genitals) and they could not see well in the dark.
- Their diets consist mainly of wheat bread and almost no meat.
Zinc Deficiency cont’d…

If zinc is mostly found in red meat and sea food, what class of people would there be a special concern for? AND why?

What can they do to make sure that they get the recommended amount of zinc in their diet?
Effects of Zinc Deficiency

- Diarrhea and chronic infections such as pneumonia can cause effective zinc excretion
- Dwarfism
- Night blindness
- Anemia
- Sickle cell disease
DID YOU KNOW?

- That low amounts of zinc in the body causes children and women to develop mental health problems.

WELL I HAVE NEWS FOR YOU:

IT DOES!!!

- Recent studies show that low zinc deficiency causes attention-deficit hyperactivity disorder, ADHD, in children and depression in women.

- Increasing the zinc level along with pharmacologic treatment, according to studies, will help to fix this problem.
Severe Deficiency

- Patchy loss of hair
- Impaired taste (hypogeusia)
- Loss of appetite/ anorexia
- Decreased thyroid hormone synthesis
Moderate Deficiency

- Delayed sexual maturation
- Growth retardation
- Pregnancy complications
- Acne
- Increased infections
Too much Zinc!!!!

- The body efficiently rids itself of excess zinc, so toxicity from dietary zinc is not so common.

Causes
- Acute gastrointestinal distress
- Nausea
- Vomiting
- cramping

"It's me acne Doc, it's gettin' so's i'm feelin' too ashamed to go out"
My point

- Zinc is essential to the body
- In order to live a healthy lifestyle for us and future children we need to take care of our bodies
- Vitamins and minerals are important to help us keep our bodies active and functioning so it can perform its daily functions and keep us living
Reference

Appreciation

THANK YOU!!!