Project Goals

Our project aims to decrease the prevalence of Vitamin D deficiency in Massachusetts and to educate residents about the dangers of deficiency and how they can prevent it.

Background

• The body's main source of Vitamin D is sunlight. Our bodies are capable of producing Vitamin D in our skin when it is exposed to UV radiation.
• Massachusetts is roughly located at the 42° latitude. At this latitude, the UV radiation is weak enough, especially during the winter, that our skin cannot synthesize Vitamin D.

Problem

• More than 45-75% of Massachusetts residents are Vitamin D deficient
• Health issues related to Vitamin D deficiency
  • Osteomalacia (Rickets)
  • High Blood Pressure
  • Cancer (Colon, Breast, Prostate)
  • Type I Diabetes
  • Weakened Immune System

Solution

• Change current medical practices:
  • Patients will be administered a nutrition panel when they visit their doctor
  • This test will inform people about all their body’s nutrient levels
• If a person is found to be deficient:
  • Dieticians can educate people about how they can increase Vitamin D naturally
  • People can also take vitamin supplements
• Non profit group that would educate people about the dangers of Vitamin D deficiency
  • Distributing pamphlets
  • Making commercials
  • Selling cookbooks which contain healthier, high Vitamin D recipes

Assessment

• Database
  • Contains the results of every patients' nutrition panel
  • Gives an accurate and easy to understand picture of how people’s Vitamin D levels change over time
• Keep track of sales figures of Vitamin D supplements
• Keep track of the dissemination of information, such as the distribution of pamphlets or the number of cookbooks sold.

Cost/Benefit

Cost
• Nutrition Panel Expensive
• Time
• Personnel

Benefits
• Inexpensive Supplements
• Insurance covers cost
• Improved Health

References

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