Introduction system is an internal system of

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The general population is always trying to get means to better their lives by ensuring good health and a suitable environment. Organic foods seem to provide amicable solutions to these two issues. The organic food production makes a huge contribution to supplementing of diets. An interesting fact is that organic farming is also proving beneficial for the environment. Though there are certain aspects which need to be considered in respect to organic food production, it has generally been shown that organic farming better than inorganic farming. This paper is going to examine how organic foods aid the endocrine system in ensuring the wellbeing of the body in general.

Organic Foods

Organic foods refer to those foods produced with the use of " synthetic chemicals, genetically engineered materials, sewage sludge of irradiation" (NRDC 1).

The livestock are also not spared in this campaign either since it is not only crops that provide food. The livestock must be reared with organic feed, in the outdoors and must not have any intakes that intend to influence their growth (FMI 1). For instance in the United States foods termed as organic " must meet or exceed the regulations of the National Organic Program (NOP)" (FMI 1) and also that of United States Department of Agriculture, USDA, (NRDC 1). This means that organic foods have to meet certain requirements without which they would not certified. The growing interest in organic foods is astounding, statistics as of 2007 showed that 1. 2 million people were "

organic producers” and 32. 2 million hectares of land globally was certified for organic production (Oates et al. 2).

An article in 2005 showed that 81% buy organic food for “ nutritional” reasons, 77% for “ freshness” while 67% to improve their health (FMI 1). It is even evident that there is diversity in reasons that lead to consumption of organic foods. What sparked interest in organic foods? Organic foods owe much of their popularity to people shunning foods that were produced in manners that harm the environment and put their health at risk since they depend on chemicals (NRDC 1).

Many people are convinced that these foods can be used as measures taken in order to promote good health thus avoiding diseases in the long run (FMI 2). The environment is a beneficiary of organic production in the sense that since the use of pesticides and chemicals is decreased, then “ local wildlife” is not affected and the farm proves to be more productive since they “ produce less waste” (Birgenheier 1). The question then is how are organic systems connected to the endocrine system?

The Endocrine System

The endocrine system is an internal system of glands in the human body (they are also found in animals) whose main work is to produce hormones (GreenFacts 1). These hormones are responsible for “ reproduction, metabolism, growth and development” (Hormone 1). Examples of hormones include insulin and sex hormones i. e. oestrogen (in females) and testosterone (in males). Examples of the glands with various distinct

functions in the body are: the hypothalamus, pituitary gland, thyroid gland, pancreas, adrenal glands, pineal glands and the gonads i.

e. ovaries and testes (GreenFacts 1).

How the Endocrine System is affected by pesticides

Pesticides and other chemicals normally used in farms results in their " residues" being present in the foods harvested and also in our surroundings i. e.

air, water and soil (Ken 64). These toxins have been linked to " respiratory problems, neurological disorders, cancer and reproductive problems" (NRDC 1). Other undisputable evidences have been confirmed by researchers in different places: at the University of Missouri, research showed men in " agricultural areas" have a less sperm count compared to those in New York or Los Angeles, at the University of Rochester linked the use of a fungicide to Parkinson's disease and at the University of Wisconsin, the effect pesticides and fertilizers on the immune and endocrine systems was established (Ken 65). These adverse effects imposed on our health cannot be overemphasized. The toxins will lead to what is known as the endocrine disruption which is the change experienced by the endocrine system as a result of a " foreign substance induced in the body" (GreenFacts 1). The endocrine disrupting chemicals (EDCs) are the responsible agents of change and they affect our system in the following ways: they attach to the body's " hormone receptors and mimic the hormone" (EDCs 1) resulting to the hormones not performing their work hence the body will either produce or stop the production of enzymes that will deal with the hormonal imbalance

created (EDCs 1). Some diseases associated with this hormonal imbalance include: “ cardiovascular endocrinology, diabetes, growth disorders, hormone abuse, menopause, osteoporosis, pituitary disorders, polycystic ovary syndrome, reproductive endocrinology, thyroid conditions” (Hormone 1) among others.

Since there is an option out, then organic foods are the way to go and all efforts should be directed at suitable alternatives.

The Way Forward

There are challenges facing the organic production currently. Precise and exhaustible studies comparing organic foods and inorganic foods and their exact health effects are yet to be fully carried out (Oates et al. 5). The current studies at best establish links and results obtained are not standard since they would differ with geographical location.

Another challenge is the variation in “ certification requirements” worldwide means there is lack of a set of standard of “ uniformity” (Oates et al. 4). On the consumer’s side, organic foods cost more and otherwise it would even have had more popularity (FMI 6). Efforts are being put in place to counteract this, for example advertising is an effective tool that will definitely catch a consumer’s attention and have positive influence toward organic food consumption (FMI 6). Organic foods are also being incorporated in schools and restaurant menus as it continues to grow (FMI 6). Not all farmers need to seek certification provided they are practicing farming that aims at reducing environmental harm and health risks (NRDC 1).

Conclusion

Organic foods though expensive as of now, with more publicity and continuous use, the prices will come down and consequently enabling people to reap the benefits of its intake. Research pertaining to organic food production is essential in settling consumer's minds who are accustomed to inorganic foods. Since they definitely prove to have lesser contents of use of pesticides and other fertilizers, people ought to resort to them as they almost guarantee no endocrine related diseases.

Certification settles the consumer's minds because it shows that the foods were made under strict regulations that have been adhered to. There is a need for more research to be carried out to prove that organic food production is not harmful to the body and if it is then way should be developed to make it safe for human consumption.

Works Cited

EDCs. How EDCs affect our Endocrine System. Organic Food Directory, 2008.

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