8.00 Biotechnology Word Wall

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| Biotechnology refers to techniques used to modify DNA or the genetic material of a microorganism, plant or animal in order to achieve a desired \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.  In the case of foods, genetically engineered plant foods are produced from crops whose genetic makeup has been altered through a process called recombinant DNA or gene \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. | Genetically engineered foods are also known as:  Biotech  Bioengineered  Genetically \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Biotechnology is used by the food industry to improve the quality of food additives, processing aids, the environment and the food \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. (rhymes with mafety!) | Food additives-  Processing aids-  Environment-  Food safety- |
| Biotechnology has impacted the food industry in a very \_\_\_\_\_\_\_\_\_\_\_\_ way. | Biotechnology has resulted in the creation of:  Newer \_\_\_\_\_\_\_\_\_\_\_\_\_ of high quality and safety.  More \_\_\_\_\_\_\_\_\_\_\_\_\_\_ and healthier foods.  Lower production \_\_\_\_\_\_\_\_\_\_\_\_. | Ethics:  Empirical claims: |
| Ethical questions associated with biotechnology include:  Environmental impact  Health and allergens  Labeling  Unknown effects  Gene source  Religion | Labeling law are designed to help consumers make smart \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ decisions. The EU and Japan have requirements that some foods derived from biotechnology must be labeled as such. The U.S. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ mandatory labeling. | Labeling is only required in the U.S. for health reasons.  Safety is addressed through non-regulatory means of outreach and \_\_\_\_\_\_\_\_\_\_\_\_\_.  Labeling would likely send a negative signal to consumers about the \_\_\_\_\_\_\_\_\_\_ of these foods. |
| Improving plant qualities is something that biotechnologists want. T or F | One result of genetically engineered produce has been a reduction of labor in production and a decrease of produce costs. T or F | An advantage of biotechnology over developing hybrids traditionally is fewer changes in nutrient content. T or F |
| When biotechnology increases the shelf life of a vegetable, a side effect is an increase of produce being thrown away at grocery stores. T or F | Scientists are looking for ways to develop environmentally friendly food processing. T or F | An advantage of biotechnology over traditional breeding methods is less nutritious products. T or F |
| Hybrid- | Traditional breeding- | Allergen- |
| Gene splicing- | Tracking the impact of new crops on the environment is needed when cultivating GMO’s. | When you put a gene from a tomato into a fish, what is a concern? |