



## Fact Sheet: You Are What You Eat, So You Will Know What You Eat

We've all heard the saying '*you are what you eat*', but with the foods being sourced across international borders, the need to '*know exactly what you eat*' has never been so important. In the next five years, new technology systems will enable you to know the exact source and make-up of the products you buy and consume.

Advancements in computer software and wireless radio sensor technologies will give you access to much more detailed information about the food you are buying and eating. Everything from the climate and soil the food was grown in, to the pesticides and pollution it was exposed to and the temperature and air quality of the shipping containers it traveled through on the way to your dinner table.

These sensor and tracing systems will let you know what you eat, before you eat it:

- **Your Food Will Have a Digital Passport** - Using second generation barcodes, wireless tags like RFID, and specialized sensors that can detect the surrounding environment and even monitor the shipping containers they travel in, you will have access to detailed information on your food. The details will include the location the food was produced in, the origins of the ingredients and details on its environmental surroundings. Additionally, you will be able to know how the production of the food impacted the environment, allowing you to make decisions on what you purchase based on how eco-friendly the products are.
- **Your Shopping Cart Will Be Smart:** You will access information on the food you are purchasing via smart shopping carts and kiosks. When you put an item in your shopping cart, you will have instant access to a wealth of information about the origins and conditions your food was created and shipped in via a network connected device that can read the digital passports on your food automatically. For example, if you are on a diet that calls for meats only from farms that use natural grains to feed their animals, you can find that information instantly. You could also specify that you prefer food grown within 200 miles and the cart or kiosk will help applying the rule as you shop, with information like buy apples instead of apricots, the apples are local.
- **Loyalty Cards Will Become Early Warning System:** Using loyalty card systems – the same cards that give you coupon-less discounts at checkout -- grocers will be able to instantly tell you when items are recalled. Today, grocers and manufactures rely on the media to communicate recalls, but even in our highly connected world, you may miss those alerts. In the future, you will be able to opt-in to receive instant recall information grocers by e-mail, text message or phone call, alerting you that the food in your refrigerator may be tainted or should be tossed. The stores will then credit your account for the cost of the food, so you don't need to bring the tainted product back to the store.

In a recent IBM study, more than 72 percent of consumers said they want even more, specific information about the contents, origins, and environmental impact of the product's they buy. In short, you want to know what you eat, and in the next five years, new technologies will help you do just that.