



Lesson 12

Food Science and technologies



Functionality

© Lower Health Risk- Dairy Products

- Cholesterol-reducing plant sterols added to fluid milk.
- Incorporation of Omega-3 fatty acids, support heart, brain, and nerve health (to milk and yogurt)
- Smart! Yogurt fortified with DHA omega-3
- Dreamerz Foods has capitalized on milk's reputation as a sleep remedy by creating a milk-based drink that also contains melatonin and hydrolyzed milk casein, which are thought to promote sleep and relaxation.





Functionality

© Lower Health Risk- **Digestion, Memory and Inflammation**

- **Ingredients to Treat Digestion** - Nearly 200 new products touting digestive health benefits were introduced in 2007, according to Datamonitor. Once limited to yogurt, these beneficial bugs are now in cheese, milk, smoothies, juice, snack bars, cereals and chocolate.
- **Brain food** - Omega-3s in fish oils to flavonoids in cocoa -- may have the ability to improve memory, sharpen concentration and even reduce the risk of Alzheimer's disease.
- **Inflammation** - Aging Baby Boomers are driving demand for "joint health" foods and beverages. Stores will likely be stocked with more products promising pain relief, either from arthritis or exercise. The popular arthritis supplement glucosamine is already showing up in beverages, including Minute Maid Active orange juice.

Functionality

◎ Functional Foods that Enhance Lifestyle:

- Linkage of diet and mood
- Linkage of diet and youth

◎ A big trend in Europe, “beauty foods” may soon be alluring U.S. consumers. Beauty-from-within products (dubbed nutricosmetics or cosmeceuticals) are claiming to erase wrinkles, give you shinier hair and even make lips look fuller. A collagen-injected marshmallow in Japan promises the plump without the pain. A Skin Balance water started it all in the U.S. A new beauty drink has been planned for release in 2008 from Coca-Cola and L'Oreal called Lumae.



8 Local, Seasonal, Natural



© Food safety and ecology/environmental issues continue to make headlines, causing many Americans to rethink where their food comes from.

© As a result, the “Local” trend is going mainstream – “locavore” has even been designated Word of the Year by the New Oxford American Dictionary.

© As people seek fresher foods, they have begun to connect in increasing



Local, Seasonal, Natural

- © The trend for local is being picked up by food manufacturers as well. Prepared foods made with ingredients, from the same region in which the product is sold, are hitting stores.
- © Locally grown fruits and vegetables often have a nutritional edge over produce raised on "factory" farms. The latter, which constitutes most of the produce grown in the US, is picked about 4-7 days before it arrives on supermarket shelves, and shipped for an average of 1,500 miles before it's sold (per Local Harvest).

9. Varietal

© Where once it was enough to say where and how a food was produced, consumers are finding more value in products that identify the specific varieties of ingredients, and breeds of animals, it was produced with.

- Were Macoun or Red Delicious Apples used to make an applesauce?
- Which breed of cow produced the milk used to make a particular cheese?



10. Green/Sustainable/Organic/Eco-Friendly

- © The rise of ethical considerations, a growing sustainability consciousness, and increased focus on “unprocessed” foods, food miles, carbon footprint, wild-caught, etc. is inspiring new approaches to eating and will increasingly capture the interest of mainstream consumers.
- © “Green-itude” is rampant. The National Restaurant Association has set up a Green Task Force, which will lead to menus printed on recycled paper, uniforms made out of wholly natural materials, and a decrease in bottled

Trends Summary

Products That Are...

1. Convenient
2. Premium/Specialty/
Differentiated
3. Adventurous/Bold
4. Ethnic
5. Authentic/Natural/
Artisanal
6. Healthful/Nutritious/
Filling/Portion-Controlled
7. Functional
8. Local, Seasonal, Natural
9. Varietal
10. Green/Sustainable/
Organic/Eco-Friendly