


## Dr. Karunakar Singh

Pedagogical innovation involves rethinking traditional teaching methods to foster deeper engagement and learning. A sample PPT presented by Dr. Karunakar Singh's student demonstrates creative approaches to education. It highlights integrating multimedia elements, fostering interactivity, and encouraging collaboration among learners. The PPT emphasizes real-world applications, aligning theoretical knowledge with practical scenarios. Innovative design, such as visual storytelling and concise content, enhances information retention. Dr. Singh's methodology also encourages student-centered learning, empowering learners to take ownership of their educational journey. This approach not only deepens understanding but also prepares students for dynamic, future-ready challenges in a rapidly evolving world.

 <p><b>NUTRACEUTICALS: Let Food be Your Medicine</b></p> <p><b>Project Presentation</b></p> <p><b>DEPARTMENT OF FOOD TECHNOLOGY</b></p> <p><b>COURSE: B.TECH FOOD TECHNOLOGY</b></p> <p><b>By Sarvika Awasthi (2002239)</b></p>	<ul style="list-style-type: none"><li>• <b>Greek Physician Hippocrates,</b> Known as father of Medicine. (said several centuries ago)</li></ul> <p>“Let Food be Your Medicine”</p> <p>The Philosophy behind is: “Focus on Prevention”</p>
<ul style="list-style-type: none"><li>• The term “Nutraceutical” was coined from “<u>Nutrition</u>” &amp; “<u>Pharmaceutical</u>” in 1989 by  Stephen DeFelice,  MD, Founder and Chairman of the Foundation for Innovation in Medicine (FIM).</li><li>• Other words used in the context: Dietary supplementation, Functional, Multi-functional Foods, etc.</li></ul>	<ul style="list-style-type: none"><li>• <b>Nutraceutical can be defined as</b>  “ A food or part of food or nutrient, that provides health benefits, including the prevention and treatment of a disease.”</li></ul>

## Assessment Innovation: Feedback Form

The feedback form for evaluating faculty by students encourages open communication regarding teaching effectiveness. It focuses on clarity, engagement, and responsiveness, allowing students to provide constructive feedback. This innovation promotes continuous improvement, enhancing teaching quality, fostering a supportive learning environment, and ensuring faculty development aligned with student needs.

**EVALUATION OF FACULTY BY STUDENTS**

Fill in the data or tick boxes as appropriate

Date <u>21.10.22</u>		Semester/Year <u>III / II</u>	
Reg. No. <u>2101334</u>	Your Programme <u>B.Tech (FT)</u>		
Subject <u>IBM</u>	Name of the Faculty <u>Dr. Karunakar Singh</u>		Other
Your Rank in the Class	Top 10%	Top 25%	Top 50%
Your Preferred Learning Style	Self-Study	Lectures <input checked="" type="checkbox"/>	Class Notes

Your Responses below are for purpose of Evaluation

Please respond to items below by ticking appropriate Box	A - Mostly		B - Quite Often		C - At Times		D - Hardly		E - Never	
	A (4)	B (3)	C (2)	D (1)	E (0)					
1. Did the faculty provide new knowledge ?	<input checked="" type="checkbox"/>									
2. Was the depth of Coverage adequate ?	<input checked="" type="checkbox"/>									
3. Was the Faculty audible ?	<input checked="" type="checkbox"/>									
4. Did the Lecture make you think ?	<input checked="" type="checkbox"/>									
5. Were you encouraged to ask Questions ?	<input checked="" type="checkbox"/>									
6. Was the Blackboard writing clear and organized ?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								
7. Were any Audio-Visual Aids Used ?	<input checked="" type="checkbox"/>									
8. Were notes dictated to you ?	<input checked="" type="checkbox"/>									
9. Were any assignments given to you ?	<input checked="" type="checkbox"/>									
10. Were they checked promptly ?	<input checked="" type="checkbox"/>									
11. Did the Evaluation help you to improve ?	<input checked="" type="checkbox"/>									
12. Was the Evaluation fair ?		<input checked="" type="checkbox"/>								
13. Did you feel motivated to learn ?	<input checked="" type="checkbox"/>									
14. Did the Faculty meet to your expectations ?	<input checked="" type="checkbox"/>									
15. Was there adequate coverage as per lesson plans ?	<input checked="" type="checkbox"/>									
16. Were the books referred by faculty available ?	<input checked="" type="checkbox"/>									
17. Were you satisfied with the teaching in general ?	<input checked="" type="checkbox"/>									
18. Were you satisfied with the class discipline in general ?	<input checked="" type="checkbox"/>									
<b>Total</b>	<b>64</b>	<b>6</b>								

Any other Comments and Suggestions :

Please remember: this box is not meant for criticism but aims at improvement for future

## Digital Innovation: Virtual Lab Links Used for Teaching

Digital innovation through virtual lab links enhances teaching by providing students with interactive, hands-on experiences in a virtual environment. These tools simulate real-world experiments, making complex concepts more accessible. Virtual labs allow flexible learning, offering students opportunities to experiment, explore, and reinforce their understanding outside traditional classroom settings.

The image displays two screenshots of the Virtual Labs website. The top screenshot shows the 'Controlling Water Activity in Food' module. It features a vertical blue bar representing water activity ( $a_w$ ) with a 'CHAPTER 1' icon on the left. A text box explains that vegetables are usually dried to a water activity of 0.30 to 0.20 for safety and quality. A 'Continue' button is visible. The bottom screenshot shows the 'Gram Staining' module, which includes a 'Fullscreen' and 'About this lab' button. The main content area displays a video play-through with a text box titled 'Salmonella and E.coli' that provides information about these bacteria and their role in foodborne illness.

**Controlling Water Activity in Food**

Experience the *Understanding Water Activity* Virtual Lab first to fully understand the *Controlling Water Activity* Virtual Lab. Test the water activity of corn dried using traditional methods.

CHAPTER 1

Vegetables are usually dried even further, to a water activity of 0.30 to 0.20, for safety and quality.

Continue

.60  $a_w$  Most microbes stop growing.

.20 & .30  $a_w$  Vegetables are usually dried to this level for safety and quality.

**Gram Staining**

Recommended order:

- Bacteria Sampling (Primary Diagnostic Lab Equipment) should be followed by Gram Staining. Then Using a Microscope

Fullscreen About this lab

Gram Staining video play-through

**Salmonella and E.coli**

Many subspecies of the genus *Salmonella* cause infections in humans. For example, *Salmonella enteritidis* causes foodborne illness.

*Escherichia coli* (*E. coli*) is commonly found in the lower intestines of warm-blooded animals. Most *E. coli* strains are harmless, but some, such as *E. coli* O157:H7, can cause serious foodborne illness in humans.

To help us identify bacteria we look at them under the microscope using a technique called Gram staining.