

Dr. Gary Mumaugh

A microscopic view of numerous green, rod-shaped bacteria, likely Bacillus subtilis, arranged in a dense, overlapping cluster. The bacteria are illuminated from the side, creating a strong sense of depth and highlighting their individual shapes against a dark blue background.

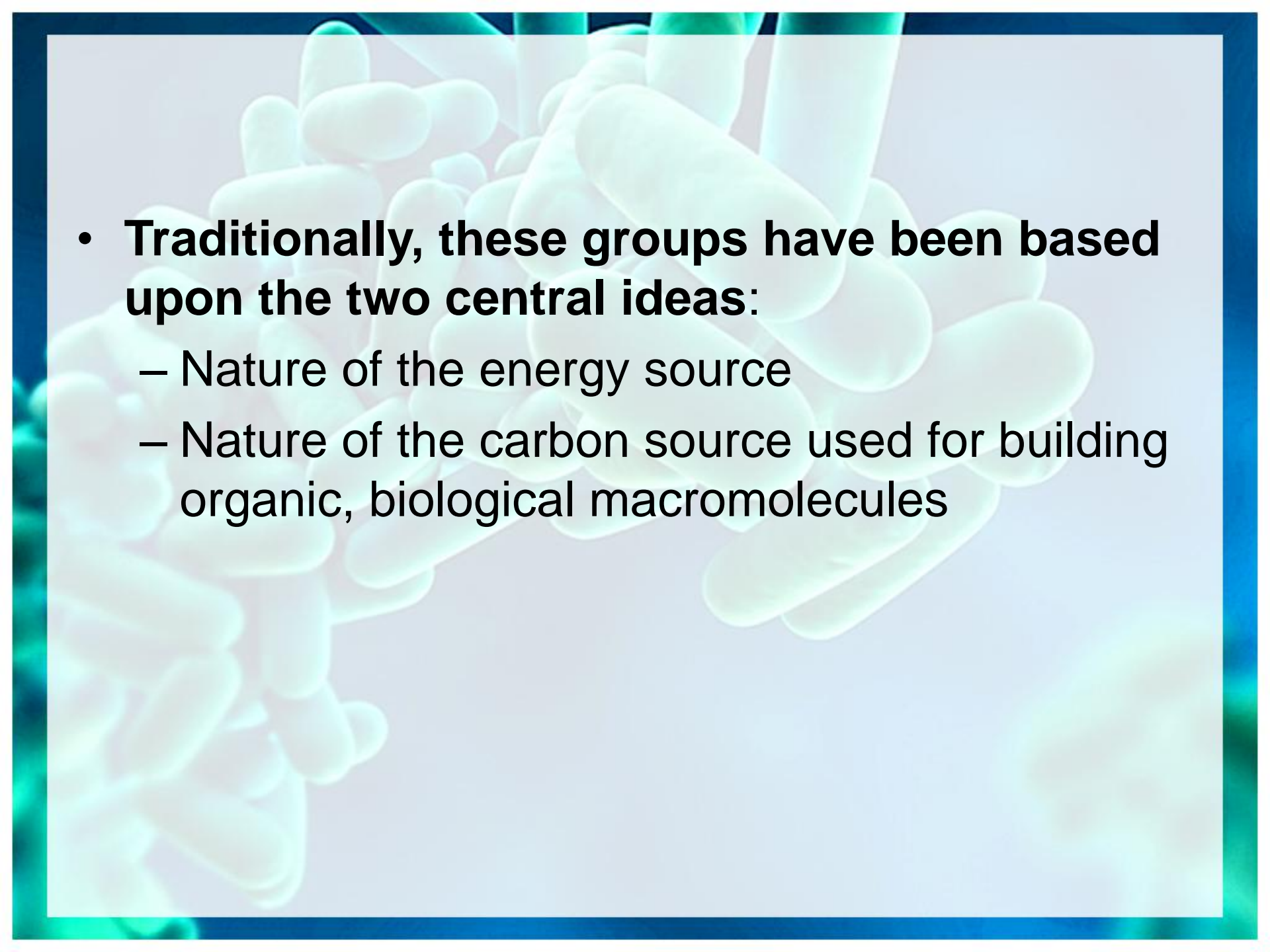
**Microbial
Metabolism**



- Microbial Metabolism: Species Distinction
- Microbial Metabolism: Types & Processes
- Adenosine Triphosphate (ATP)
- Energy Production Process
- The Krebs Cycle
- Electron Transport Chain
- Chemiosmosis
- Fermentation

Microbial Metabolism: Species' Distinction

- Metabolism of microbes is a way of differentiating one species from another
- Metabolism offers insight into a microbe's environmental niche
- Prokaryotes can be organized into groups based upon their extremely diverse nutritional and metabolic needs

- 
- A microscopic view of various bacterial cells, including rod-shaped and spherical forms, some with flagella, set against a light blue background. The image is framed by a dark blue border.
- **Traditionally, these groups have been based upon the two central ideas:**
 - Nature of the energy source
 - Nature of the carbon source used for building organic, biological macromolecules