

♪ Mindy Membrane Guards the Way ♪!

Verse 1

Around every cell, from head to toe,
Mindy Membrane bends with the flow.
A flexible border surrounding the cell,
Protecting Cellville and doing it well!

Two layers of phospholipids line up just right,
Water-loving heads with their tails tucked tight.
Together they form her bilayer wall,
A flexible boundary surrounding it all!

Chorus

At the border, Mindy's there,
Choosing what can pass with care.
She's the Gatekeeper, through and through,
Selective about what passes through.
Protecting the cell in work and play,
Mindy Membrane guards the way!

Verse 2

Oxygen can slip right through with ease,
While proteins help move what the cell needs.
Channels and carriers open the way,
Moving important things where needed each day.

Pumps use ATP to move things through,
Receptors catch signals and pass them on too.
Selective and careful, that's Mindy's role,
Controlling what crosses to protect the whole!

Chorus

At the border, Mindy's there,
Choosing what can pass with care.
She's the Gatekeeper, through and through,
Selective about what passes through.
Protecting the cell in work and play,
Mindy Membrane guards the way!

Verse 3

oxidized fats and smoke can add to the strain,
Free radicals can damage her membrane.
Oxidative stress can build up inside,
Damaging proteins and lipids far and wide.

Healthy fats bring building blocks cells can use,
For fresh membrane lipids to help them renew.
Antioxidant-rich foods help defenses stay strong,
Helping protect Mindy's membrane all along!

Bridge

Good food, good sleep, get up and move,
Give your cells what they need to renew!
Healthy fats & colorful plants on your plate,
Help Mindy's membrane stay healthy and great!

Final Chorus

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Choosing what can pass with care.
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Selective about what passes through.
Protecting the cell in work and play,
Mindy Membrane guards the way!