

WWW.MICHAELTRAUTMAN.COM



The Inside Story of Our Outsides

WRITTEN AND PERFORMED BY MICHAEL TRAUTMAN

STUDY GUIDE

DEVELOPED WITH ASSISTANCE FROM
CHERYL HART

COPYRIGHT 2008
MICHAEL TRAUTMAN

WWW.MICHAELTRAUTMAN.COM
INFO@MICHAELTRAUTMAN.COM
68 BANCROFT STREET
PORTLAND, ME 04102

207.450.5342

Our bodies speak. Every facial expression, every gesture, every little movement is a statement. BODY TALK teaches you how to understand what you and other people are saying without words. Michael Trautman's thirty years of studying movement has given him special insight into how we speak with our bodies. In BODY TALK Michael shares his secrets through lecture and demonstration. This highly entertaining presentation will open the eyes of students and teachers alike to the language that we all share and can already speak without even knowing it!

This STUDY GUIDE is designed to provide teachers with introductory information about Michael and what to expect in the program and/or workshop. It also contains some follow up activities for teachers to use with students after having seen the performance or participated in the workshop.

BIOGRAPHY

Michael Lane Trautman started out in life as a fairly normal kind of person. After growing up in Springfield, Illinois, he attended William Jewell College in Liberty, Missouri where he studied Political Science with the intention of becoming a lawyer. After four years of college, Michael decided that the legal profession was not going to be as much fun as he felt one should have with their career, so he left school and started looking for something to do that would be fun and fulfilling. In 1976 he took his first Mime class, and in 1977 was invited to become a founding member of Mimewock, a Kansas City based school and performing company. Since then, he has been having fun performing throughout the world, and has achieved a very high level of fulfillment from providing comic relief to those in need. Variousy identified as a visual comic, performance artist, new vaudevillian, mime (gasp), physical comedian, storyteller, magician, and fool, he claims only to be a clown...and not a very traditional clown at that. He has appeared in such prestigious venues as the *New York International Festival of Clown Theater*, *Festival D'Ete in Quebec*, the *General Jackson Showboat* at Opryland USA, the *Just For Laughs Festival* in Montreal, and *The Kennedy Center for the Performing Arts*. He was featured on *WOW! The Most Awesome Acts On Earth*, an ABC Television Special, and *The Statler Brothers Show* on TNN. Obviously he has little discretion. Michael was an Artist-in-Residence at Mabou Mines Theater Company in New York City, and has also been an Artist-in-Residence for the Drama Department of The Catholic University of America where he adapted and directed Alfred Jarry's *Ubu Roi*. In the 1999-2000 season, Michael was the star clown in the national tour of *OOPS! The Big Apple Circus Stage Show* directed by Tony Walton. Since the fall of 2006 Michael has had the pleasure of working with Mr. Walton

on the Broadway bound production of ***Busker Alley*** starring Jim Dale. Recently, Michael has been producing, directing, and hosting ***The Big Time Vaudeville Show***.

Michael has been performing in schools throughout North America since 1976. He has given over 3500 performances of his highly acclaimed school assembly programs. His originality as a performer and rapport with audiences young and old have brought him a reputation as a performer who is both hilariously funny and profoundly moving. He has been a featured performer at The Calgary, The Edmonton, The Vancouver, The Ottawa, and The Winnipeg International Children's Theater Festivals. This school assembly program is adaptable to any audience from K through 12.

Cheryl Hart has been in education for 30 years as a teacher of children ages 3-14, and as a mentor to teachers. She has worked extensively on curriculum and program development with a focus on integrating the arts and academic curriculum. For the past several years, Cheryl has had the pleasure to be part of Breakwater School, a small, progressive independent school in Portland, Maine. In addition to giving time and energy to environmental and social justice causes, she is a member of a large chorus and two different bands.

BODY TALK

BODY TALK uses Michael's vast experience in performing for children to teach them valuable information about physical communication. In the show, Michael will perform original material from the following list. Not all pieces may be presented in a given show. The content of the show is determined by age and time (both mine and the audience's).

WELCOME – The performance begins with simple “Hello!” Michael demonstrates how body language affects this simple greeting in a variety of ways. “Hello!” sounds very different and carries different meanings depending on the attitude and body position of the speaker.

BUBBLEGUM – Michael's classical illusionary mime routine demonstrates a particular, very physical, character. In this case a kid. And his gum. The students should note the various age characteristics (body positions, energy levels, rhythms), actions (what is the kid actually doing with his gum and how does he show them what they see?), and emotions (what emotions do you see, and how are they expressed?)

SPIT PHASSBAHL ON THE MOUND – This is Michael's take on the classic story of “Casey at the Bat”, by Ernest Lawrence Thayer. Michael has re-written the story of that day from the pitcher's point of view in the same meter and rhyme scheme as the original poem. (see appendix A) Using his movement skill and demonstrating the principles of the Delsarte System, Michael tells the story and shows all the action and various characters.

THE DELSARTE SYSTEM OF EXPRESSION – Michael will discuss this

theory of movement developed by Francoise Delsarte (1811-1871) as a system for teaching dancers and actors the details of physical gesture and communication. In a fun and fast moving demonstration, the students are shown how each part of the body carries specific meaning (intellectual, emotional, and physical), and how controlling the body with regard to these divisions can create physical manifestations of character, thought, and emotion. In discussing these ideas with the students, teachers can help them learn to better identify the feelings and thoughts of their fellow students, encouraging better interpersonal relationships, and improving communication skills.

PING PONG – Using his wide variety of physical skills, including Mime, Magic, Physical Comedy, Juggling, and audience participation, Michael's Clown will show the students how command of the body enables the performer to create illusions that seem to be the real thing. The primary tool of any magician is the ability to misdirect. Misdirection is achieved through creating a physical impression for the audience that one thing has happened when in reality, something quite different has occurred.

Students participate throughout the performance both actively and passively. At various points in the program (*Welcome* and *Delsarte*) they are asked for their impressions of exactly what a given movement or gesture might mean. They are engaged in the highly entertaining routines and then immediately following each act, direct connections are made between elements that they just observed and the application of those elements. (*Bubblegum*, *Spit Phassbahl on the Mound*, *Ping Pong*) In the Delsarte section, the process of building a physical character is demonstrated. Shaping the body according to suggestions from the

students about intellect, emotion, and physicality, the students see how all people share a common language of gesture, and they learn how they can begin to create physical characters. They will also gain an understanding of how to write more descriptively about character. Finally, the students will have occasion to be a part of the show in the highly interactive *PING PONG* routine. In addition, schools that choose to have the **BODY TALK WORKSHOP** will give students a much greater opportunity to experience the various movement disciplines that are used in the performance.

EDUCATIONAL OBJECTIVES:

In dance, music, theatre, and the visual arts, people express ideas and emotions that they cannot express in language alone. In order to understand the range and depth of the human imagination, one must have knowledge of the arts. (From the Massachusetts DOE Curriculum Frameworks)

Specifically, BODY TALK will help students develop language for describing characters, and a concrete-visual schema from which to understand and then describe elements of character.

Students will develop acting skills to portray characters who interact in improvised and scripted scenes.

Movement Elements and Dance Skills Students will demonstrate understanding of alignment, articulation of body parts, initiation of movement, weight shift and balance, elevation and landing, and fall and recovery.

Dance (Movement) as Expression Students will demonstrate an understanding of dance (movement) as a way to express and communicate meaning.

Purposes and Meanings in the Arts Students will describe the purposes for which works of dance and theater were and are created, and, when appropriate, interpret their meanings.

Roles of Artists in Communities Students will describe the roles of artists in societies of the past and present.

Interdisciplinary Connections Students will apply their knowledge of the arts to the study of English language arts, foreign languages, health, history and social science, mathematics, and science and technology.

Physical Activity & Fitness Students will acquire and refine a variety of manipulative, locomotor, and non-locomotor movement skills.

Links to other disciplines

Writing: Students will write with a clear focus, coherent organization, and **sufficient detail**. Students will write stories or scripts containing the basic elements of fiction (**characters**, dialogue, setting, plot with clear resolution). Write stories or scripts with **well-developed characters**, setting, dialogue, clear conflict and resolution, and sufficient descriptive detail.

Other: Understanding and interpreting non-verbal communication or “Body Talk” aids in the development of interpersonal communication skills. This understanding and experience also can be useful in bullying prevention training. Specifically, helping students to grasp the concept of “cruel humor” which is often used in bullying others.

Post-Show Activities

- Watch a film clip with the sound off. Discuss what you think the people in the film are doing, feeling, saying to each other.
- Observe other students on the playground from far enough away that you can't hear what they are saying. Try to figure out how they are feeling.
- Take turns trying to show different emotions by the way you are standing.
- Try to show different emotions without moving.
- Pick a specific emotion and show how you would walk if that is how you were feeling. Then try to walk at a different speed and show that same emotion. What happens?
- Think of a character from a story. Then try to show how you think they would look physically. How would they sit? stand? walk? run? Show this character as they cook breakfast.
- Create a character based on the movement of a specific animal. If a person is like a squirrel, how would they move? A monkey? A horse? An elephant? Etc.
- To create a silent movie of your own, either by yourself or with a group:
 - Think of an idea for a story or an event.
 - Make an outline of the story, listing each step or scene that tells a part of the story.
 - Film your rehearsals, then, watch them to see how you can improve your performances.
- Film a series of character sketches. Decide how you will create each character and how the character will move. View your film and have others write something describing the character you created.

BODY TALK WORKSHOP OUTLINE

Body Language - How to Understand and Use What We Already Know

This workshop will focus on teaching students how to use mime and movement techniques to develop physical characters and to use and understand the gesture as a component of communication. I draw from the teachings of The Delsarte System of Expression, Tony Montanaro, and Jacques Lecoq. Some of the elements of the workshop are as follows.

Warm-Up. Stretching, loosening, and warming the body at the start of class. Getting students to become comfortable with movement, and expanding their movement vocabulary. Exercises from dance, mime, yoga, and acrobatics are employed.

Isolations/Separations. The basis of Mime Technique, and all movement, lies in the ability to move and control the various parts of the body independently of one another.

Undulations. Movement that begins in one part of the body and travels through consecutive parts to the opposite end. (i.e. head to toes; fingertip to fingertip)

Illusionary Technique and Graphic Mime. Using the body to describe the physical world.

Delsarte System. Body language and how to read and use it.

Movement Vocabulary. Learning to expand one's movement vocabulary through exploration of movement found in nature.

Time and Timing. Use of varying rhythms to find and show attitudes and emotions. Also, exploring the great secret of comedy – timing.

Improvisation. Many of the movement exercises are improvisational in nature. We will make use of additional theater games and improvisation exercises in exploring characters and their development.

Cooperation. Teaching students to work in group situations to find creative solutions to tasks.

Research. Building a foundation for further creativity.

BIBLIOGRAPHY

Bobo, J.B. **The New Modern Coin Magic**. Chicago: Magic Inc., 1966. The acknowledged prime source for coin magic/sleight of hand.

Johnstone, Keith. **IMPRO**. New York: Theater Arts Books, 1979. A series of exercises and discussions in teaching and learning improvisation. Adult.

Kipnis, Claude. **The Mime Book** photos. Grade 7–Adult.

Montanaro, Tony. **Mime Spoken Here**. Gardiner, ME. Tilbury House, 1995. The greatest American teacher of Mime speaks about his methods and art.

Spolin, Viola. **Improvisation For the Theater**. N.W. University Press, 1976. Recognized classic of theater games for instructors. Adult.

Robinson, Davis Rider. **The Physical Comedy Handbook**. Heinemann, 1999. An excellent “How To” guide for slapstick and physical comedy.

Towsen, John. **CLOWNS**. New York: Hawthorne Books, Inc., 1976. A complete and comprehensive survey of the clown throughout history and throughout the world.

Thayer, Ernest Lawrence. **Casey at the Bat**.

Books for students:

Howard, Vernon. **Pantomimes, Charades and Skits**. New York: Sterling Publishing Co., Inc., 1974. The author describes the techniques involved in silent portrayal of dramatic situations using body language, dramatic gesture, and facial expressions. Grades 4–6.

Gasiorowicz, Nina. **The Mime Alphabet Book**. New York: Lerner, 1974. A series of photographs pantomiming words that start with each letter of the alphabet. Grades K–3.

Naik, Anita. **Read the Signals: The Body Language Handbook (Really Useful Handbooks)** Ages 9-12

Wolfe, Gillian. **Look! Body Language in Art** Ages 7-11plus

Weber, Rebecca. **Body Language** (Spyglass Books: People & Cultures) Ages 4-8

Appendix A

Casey at The Bat

By Ernest Lawrence Thayer

The Outlook wasn't brilliant for the Mudville nine that day:
The score stood four to two, with but one inning more to play.
And then when Cooney died at first, and Barrows did the same,
A sickly silence fell upon the patrons of the game.

A straggling few got up to go in deep despair. The rest
Clung to that hope which springs eternal in the human breast;
They thought, if only Casey could get but a whack at that -
We'd put up even money, now, with Casey at the bat.

But Flynn preceded Casey, as did also Jimmy Blake,
And the former was a lulu and the latter was a cake;
So upon that stricken multitude grim melancholy sat,
For there seemed but little chance of Casey's getting to the bat.

But Flynn let drive a single, to the wonderment of all,
And Blake, the much despised, tore the cover off the ball;
And when the dust had lifted, and the men saw what had occurred,
There was Jimmy safe at second and Flynn a-hugging third.

Then from 5,000 throats and more there rose a lusty yell;
It rumbled through the valley, it rattled in the dell;
It knocked upon the mountain and recoiled upon the flat,
For Casey, mighty Casey, was advancing to the bat.

There was ease in Casey's manner as he stepped into his place;
There was pride in Casey's bearing and a smile on Casey's face.
And when, responding to the cheers, he lightly doffed his hat,
No stranger in the crowd could doubt 'twas Casey at the bat.

Ten thousand eyes were on him as he rubbed his hands with dirt;
Five thousand tongues applauded when he wiped them on his shirt.
Then while the writhing pitcher ground the ball into his hip,
Defiance gleamed in Casey's eye, a sneer curled Casey's lip.

And now the leather-covered sphere came hurtling through the air,
And Casey stood a-watching it in haughty grandeur there.

Close by the sturdy batsman the ball unheeded sped-
"That ain't my style," said Casey. "Strike one," the umpire said.

From the benches, black with people, there went up a muffled roar,
Like the beating of the storm-waves on a stern and distant shore.
"Kill him! Kill the umpire!" shouted someone on the stand;
And it's likely they'd a-killed him had not Casey raised his hand.

With a smile of Christian charity great Casey's visage shone;
He stilled the rising tumult; he bade the game go on;
He signaled to the pitcher, and once more the spheroid flew;
But Casey still ignored it, and the umpire said, "Strike two."

"Fraud!" cried the maddened thousands, and echo answered fraud;
But one scornful look from Casey and the audience was awed.
They saw his face grow stern and cold, they saw his muscles strain,
And they knew that Casey wouldn't let that ball go by again.

The sneer is gone from Casey's lip, his teeth are clenched in hate;
He pounds with cruel violence his bat upon the plate.
And now the pitcher holds the ball, and now he lets it go,
And now the air is shattered by the force of Casey's blow.

Oh, somewhere in this favored land the sun is shining bright;
The band is playing somewhere, and somewhere hearts are light,
And somewhere men are laughing, and somewhere children shout;
But there is no joy in Mudville - mighty Casey has struck out.

For other ideas about using baseball as a curriculum tool, here are some links to the history of baseball, and the math of baseball:

The Baseball Almanac <http://www.baseball-almanac.com/>

19th Century Baseball <http://www.19cbaseball.com/>

Baseball Reference and Statistics <http://www.19cbaseball.com/>

Baseball Hall of Fame <http://baseballhall.org/>

Baseball and Curriculum-related Sites <http://www.teachersfirst.com/baseball.htm>

Appendix B

SPIT PHASSBAHL ON THE MOUND

by Michael Lane Trautman

Copyright 1983

'Twas the last game of the season, when the winner wins it all.
The pitcher, strong and cunning, was a tall man named Phassbahl.
His record for the season, thirty wins and just one loss,
But the feeling still pervaded this game would ride on just one toss.

For eight innings Spit was perfect, or very nearly so,
Just two hits,...two runs,...two homers, to Casey Spit let go.
But the Mudville team was losing by a score of two to four,
And Spit knew in the ninth that they would score no more.

The first man up was Cooney, Phassbahl threw a gentle curve.
Cooney hit a liner that went straight and didn't swerve,
Right towards Phassbahl's nose it came, a bullet aimed to kill,
But Spit reacted faster with his glove than with his skill.

"AAAAAAHHHHH!!!.....One Out!"

The second man was Barrows, a batter feared by all,
So Spit threw forth his namesake, a blazing hard fastball.
Barrows undercut it, and the ball did rightly soar,
Up so high that Barrows a hundred times could score.

But the sun that day was shining hot and very high.
Spit raised his glove to keep the blinding blaze out of his eye.
And then from out of nowhere, like a falling me-te-or,
The ball returned to Phassbahl's glove, Two Outs! and one hand sore.

Next up was Flynn, a lulu, he could barely see the plate.
So Phassbahl threw his slow-ball, half-an-hour late.
Flynn was soon asleep, and from his throat there came a snore,
But just before the ball came in, the crowd let loose a roar -

"WAKE UP KNUCKLEHEAD!"

The noise so loud made Flynn jump three feet into the air,
It frightened him so greatly that straight up stood his hair.
Phassbahl looked on helpless as Flynn landed on the plate,
Where his bat came round and hit the ball, hands guided by strange fate.

“A single!” cried the crowd, for they were all amazed.
Phassbahl wasn’t worried, he wasn’t even fazed,
For Jimmy Blake was up next, the man they call a cake,
‘Cause Jimmy had gone hitless for the season at the plate.

Spit looked at Jimmy Blake and threw a long and winding curve.
Jimmy crouched down in the batters box and gathered all his nerve.
He closed his eyes, he held his breath, he whispered “Oh why me?”
When into his back pocket flew a yellow bumble bee.

Well the extra added input in Jimmy’s painful swing
Made Phassbahl look plain finished when Jimmy hit that thing.
The ball flew over second. The runners did advance.
Two men on and Casey up! Now Mudville had their chance!

Mighty Casey in the batter’s box, Spit Phassbahl on the Mound.
And each man knew the winner’s name in history should go down.
I wound my arm around and round, a screwball just for fun.
Casey watched it sail right by. The umpire called “Strike One!”

The second pitch was all I had, a fastball straight and true.
Casey watched it fly right by (“No Thanks”) The umpire yelled “Strike
Two!”
Just one more pitch, just one more play, the fans did pay to see.
I was looking for the final out, I was looking for strike three.

I peered in at Casey. He glared back at me.
I could see that he would never fold. There was a knocking in my knees.
But then I thought I know the answer, I know what I can do!
I loaded up the baseball with a wad of sticky goo.

Then deep inside I told myself, “I know this isn’t fair.”
But I thought the chance to win was worth the sin, I said I didn’t care.
I knew the umpire couldn’t see it, I knew I was home free.
And sure enough, when I threw the stuff, the umpire called “Strike Three!”

When the stands were finally empty, and the fans had all gone home,
I went back out on the mound, but I was feeling all alone.
You see, no one loves a cheater, even if he wins the game.
I guess that's why you'll never see Spit Phassbahl in the Baseball Hall of
Fame.

Appendix C

Reprinted by permission.

Use Your Amuse System to Boost Your Immune System

Humor Your Tumor

"The art of medicine consists of keeping the patient amused while nature heals the disease." Voltaire

A managed care consultant dies and goes to Heaven. Frankly, he can't believe his good fortune in being there, given the life he has led. But St. Peter checks the records and says, "There's no mistake, you're supposed to be here. See, it says right here that you are scheduled for Heaven...and you're authorized for three days."

Physicians and researchers have long known that stress weakens the immune system, leaving you more vulnerable to illness. Only in the mid-1980s, however, did researchers begin to study the positive impact of humor and laughter on the immune system. Your sense of humor provides a powerful antidote to immunosuppressive effects of stress in two ways: through 1) indirect effects resulting from humor's ability to help you cope on the tough days (minimizing or eliminating the negative impact of stress on the immune system), and 2) direct positive effects upon the immune system, and. In this article, we'll focus only on the direct immunoenhancement effects of humor.

By early 2006, more than 30 studies had examined the impact of humor and laughter on the immune system. While some of these studies failed to show a positive effect, most have shown that that humor does strengthen several different components of the immune system. This research has looked at both humoral (immunoglobulins) and cellular immunity. In the case of the former, the great majority of the studies have focused on immunoglobulin A (IgA). IgA resides in the mucosal areas of the body and helps protect you against upper respiratory infections like colds and flu. Most of these studies have shown significant increases in concentrations of IgA in response to comedy programs designed to produce a lot of laughter.

In my seminars in both corporate and healthcare settings, I have often had people come up to me afterwards and share an experience that is consistent with these immune system findings. They note that they often get sick when dealing with a marital problem or unusually high job stress (most jobs usually have some degree of stress these days), or after getting some form of really bad news. When they are emotionally distressed, their immune system simply doesn't do as good a job at fighting of the source of illness. When all is going well, they don't get sick as often.

While the impact of humor on IgA has received the greatest amount of attention

among researchers (it is cheaper to do, since salivary IgA can be tested; this avoids the need to do expensive immunoassays on blood), several studies have now documented that humor increases both the number of and activity of Natural Killer (NK) cells. This finding is especially important for cancer patients, since NK cells seek out and destroy tumor (cancer) cells (they also destroy virally infected cells, even with no prior exposure). This finding is one reason why oncology units of hospitals across the country are now so interested in the "therapeutic benefits" of humor. While humor and laughter are clearly not a "magic bullet" capable of curing cancer, they do create a set of conditions within the body which help mobilize the body's own built-in healing resources. Just as negative emotion (especially when chronic) can interfere with the body's immune response, positive emotion, especially a powerful source such as humor and laughter facilitates the response.

It is important to note that this finding has been obtained for children, as well as adults. In one study, for example, elementary school who scored higher on a measure of the extent to which they used humor to cope had higher levels of (salivary) IgA and a lower frequency of different kinds of infections. As the level of cancer-related stress increased for these children, the high-coping-humor kids were significantly less likely than the low-coping humor kids to come down with infections. This reduced infection finding is especially important to note, since it suggests that the immunoenhancement effect of humor is strong enough to help sustain other aspects of health and wellness as these children and their doctors battle the cancer.

There's no evidence that humor and laughter add years to your life, but they certainly add life to your years.

There are few sources of stress in life greater than the words, "You have cancer." The first Sunday (or week) of June is generally celebrated across the country as National Cancer Survivors Day. I am always somewhere in the country doing a program on this day for cancer patients and their families. And there are always several people who come up to me afterwards and say, "You know, you're absolutely right; if it weren't for my sense of humor, I would not have survived the treatments, let alone the disease. Finding things to laugh at was what got me through my ordeal, one day at a time." So you get a double bonus from humor; your body is assisted in battling the disease at the same time that you're helped through the emotional struggle to cope.

At one Survivors Day Celebration, a woman came up to me after my program and said that she had been battling brain cancer for quite a number of years. Her doctors were dumbfounded that she was still alive, given the nature of the cancer she had. She told me she was convinced that it was because she always made it a point to find things to laugh at every day no matter how she felt that day. While her story has to be considered an anecdote, and not research evidence, I have come across enough examples like hers to convince me that at least in some cases using humor to sustain a strong upbeat, positive frame of mind that is full of hope and optimism is enough to extend survival where a negative, hopeless, pessimistic outlook would have doomed the patient to death. Other articles at this website, especially those focusing on the broader field of psychoneuroimmunology, make a convincing case for this notion.

Other components of the immune system have also been studied in connection with humor and laughter, but they have used small samples and have not been replicated

sufficiently to consider them as established benefits of humor (although their consistency with more frequently-studied components of the immune system suggest that they may well one day become well-established findings). These findings indicate that humor and laughter produce increased levels of IgM and IgG, additional parts of your humoral immune system. IgM antibodies are the first to arrive at a location within the body as a part of the humoral immune response. After IgM does its initial work, IgG takes over. It is IgG antibodies that are produced in the greatest amount in the body, and that are responsible for long-term immunity. When you are immunized, for example, it is the IgG antibodies that are tested to see if the procedure was successful. Laughter has also been shown to increase levels of Complement 3, a part of your immune system that helps antibodies pierce through defective or infected cells in order to destroy them.

With respect to cellular immunity, watching a one-hour comedy video has been found to produce 1) increased number of B cells (this is not surprising, given the increased levels of IgA, IgG, and IgM, since B cells are responsible for making all the immunoglobulins), 2) increased number of, and activation of, T cells, 3) increased number of Helper T cells (the cells attacked by the AIDS virus), 4) increased ratio of Helper/Suppressor T cells, and 5) increased levels of Gamma Interferon. Gamma Interferon plays an important role in the activation of NK cells. It also contributes to the growth of cytotoxic T cells and the maturation of B cells. It is best thought of as a kind of orchestra leader that regulates the level of cooperation between cells in the immune system, and tells different components of the immune system when to turn on and off.

Taken as a whole, then, it's clear that there is something about humor and laughter that causes the immune system to "turn on" metabolically and do more effectively what it is designed to do - promote health and wellness in the face of internal or external threats. But while these data are exciting, they do not mean that laughter will cure you from cancer, or any other disease. Humor and laughter are not replacements for the treatment you or your loved one are undergoing. But there's now every reason to believe that patients make an important contribution to their own treatment by managing their frame of mind or emotional state. Building more laughter into your life helps assure that you'll have all your body's own natural healing resources fully available to you. Your body will be working for you, not against you.

Remember to take you illness seriously, but take yourself lightly in dealing with it on a day-to-day basis. So lighten up! Jest for the health of it.

SeaHorseKeeper.com

Designing Arts, 345 San Marcos Street, San Gabriel, California 91776, United States.