בס"ד

CFsociety
cfsociety.org
supporting families with cystic fibrosis

brings you

The CFS Gazette

November 2014
Volume I
Issue 2

CFsociety
cfsociety.org
supporting families with cystic fibrosis

Yanky Spira
Director
718-866-9000 ext. 101
Cell: 917-831-9951
yspira@cfsociety.org

Debbie Spira, MS CSP
Program Director
718-866-9000 ext. 102
dspira@cfsociety.org

Pessy Schlafrig
Medical Coordinator
718-866-9000 ext. 103
pessys@cfsociety.org

Aileen Vizel, RD CDN
Nutritionist
718-866-9000 ext. 104
nutrition1@cfsociety.org

Heshy Fischer
Executive Director
718-866-9000 ext. 105

Rabbi Dr. Ben-Zion Twerski, PhD
Psychologist

Dr. Dorothy Bisberg, MD
Pulmonologist

Yedidah Sachs-Yasgur, LCSW-R EMDR
Social Worker

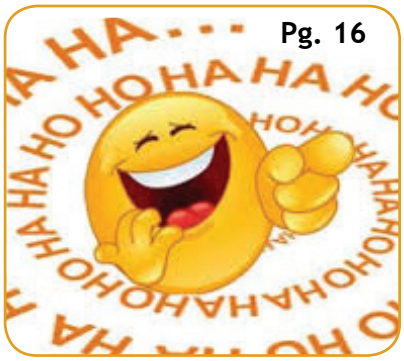
Editor-in-Chief
Debbie Spira

Proofreaders
Aileen Vizel
Yanky Spira

Graphics by CZ Design
CZdesign1460@gmail.com/917-627-1460

CF Society
4118-14th Avenue, Suite 11
Brooklyn, NY 11219
Phone/Fax: 718-866-9000
Email: cfsocietyorg@gmail.com
Website: www.cfsociety.org
(currently under construction)

TABLE OF CONTENTS



OUR HEADLINES IN THE BOTTOM LINE

To Subscribe to The CFS Gazette, email: subscribe@cfsociety.org

Editor's Note

Howdy-do, everybody!

Do you know what everyone's been talking about this past month? If you answered the NACFC, you are certainly right (medically, the NACFC was THE place to be in October; read more below and catch some tidbits in The Bottom Line). And yes, a whole load of baby wipes have been recalled for possible contamination blamed on the bacteria B. Cepacia (please visit http://www.daytondailynews.com/news/news/breaking-news/baby-wipes-recalled-due-to-possible-bacteria/nhsM5/ for the list of recalled company names).

But here's what I'm really getting at. There's been lots of buzz from the CF street about LIFE EXPECTANCY. Why is that? Read on.

As we all know, it is fairly impossible to predict how long a person is expected to live with CF. During the 1950's in the United States, very few people with CF had lived long enough to make it to elementary school. By 1985, the median survival age had only reached about 25 years, and jogging forward about 20 years to 2007, the predicted survival age had thereafter extended to a whopping 37.4 years.

What's it like in 2014? According to the most recent Patient Registry data, the median predicted age of survival for people with CF is now in the early 40s. In fact, in today's day and age (no pun intended!), a growing number of people with CF are not only living well into adulthood and leading healthy lives; they are going to school, establishing careers, getting married, and having children of their own. FYI: The oldest person diagnosed with CF in 2012 was 76 years old!

But this is just data regarding the American CF population. How do these numbers compare to those of other countries? Let's take a look.

In the UK, the median predicted age of survival among their CF population as reported in 2012 is 43.5 years. As seen in the U.S., this number has steadily risen over the last 25 years, with the survival age of 43.5 in 2012 comparing favorably to 2008's 38.8 years. What is perplexing is that this information does not tally with a recent finding regarding UK lung function in comparison to the data coming out of the U.S. (see further details in The Bottom Line)! FYI: In 2012, the oldest man with CF listed on the Registry in UK was 83 years old, and the oldest woman was 81.

> The median age of survival for Canadian CF patients is now among the highest in the world

Australia, on the other hand, compares less favorably to either of these countries. Though the last three decades have demonstrated an increasing survival rate of those affected by CF, in today's 2014, the average life expectancy for Australians with CF is 38 years. That's in line with old data from the U.S. and the UK that was reported more than five years ago! FYI: Every four days, an Australian baby is born with CF.

But all this is not what's set the tongues wagging. That's because we haven't discussed Canada yet! Ready for the drum roll? Recently announced at the North American Cystic Fibrosis Conference (NACFC) in Atlanta, Georgia, the median age of survival for Canadian CF patients is now "among the highest in the world." Median age is presently estimated to be 50.9 years of age! This data was collected from all 42 CF clinics located throughout Canada.

Now, having noticed that Canada is distinguished as being "**among** the highest", I went searching for some more CF median survival factoids around the world. Where else can such survival rates be found? Not New Zealand, where median age is found to be just 35 years. Not Russia, with the median age in 2007 being just 25 years (although they claim to have a sizeable amount of people with CF who are above 50, and even 60 years old). Not even Ireland, where they have the highest incidence of babies diagnosed with CF, 1 in every 1350 babies (in comparison to the rate of 1 in 3000-4000 babies in the U.S.). There the average survival age is between 35-40 years.

O' Canada, thou hast been crowned!

Still, as you all can tell, the median survival age keeps increasing for virtually the entire CF population around the world. Every few years, the numbers climb ever higher. The future is ABSOLUTELY thrilling!

In other news, peruse our pages further and see how our nutritionist Aileen Vizel concocts a tantalizingly informative account of our basic dietary needs. Make your way to author M. Wiseman's first short story in the CFS Gazette, where she shows the value of annoying neighbors who prove surprisingly less pesky than presumed. And ready yourselves for our very first guest columnist, whose personal story about her highly secret life will capture your eyes and heart.

A HUGE shout-out to our selfless cartoonists Roy Doty, Harley Schwadron, and Mark Andersen for their kind and thoroughly funny contributions to the CFS Gazette.

We anticipate your feedback!

Stay safe, stay healthy. Stay sane.

Debbie Spira

Q&A

I know how important exercise is for healthy lung function. However, with CF, we are also dealing with maintaining and gaining weight. How can we reconcile both? I find that it's a catch-22, not burning calories while exercising.

-Name withheld to maintain privacy

Aileen Vizel Responds:

There are many different types of exercises that we can do, and each one targets a different area of the body and uses different mechanisms to achieve different results. When dealing with CF, as you so clearly stated, we want to increase lung function and muscle strength while simultaneously conserving calories. I have found that the best way to achieve both these goals is by choosing low impact non- aerobic exercise, while making sure to hydrate properly and replenish calories during and after exercise. To be more specific, weight lifting, stretching (I know it sounds like nothing but it can really help!) and yoga are all examples of great exercises that can stimulate coughing and help clear out the lungs as well as increase strength and flexibility. As well, I can not stress enough the role of hydration in conjunction with exercise. Without hydration, exercise will dry out the lungs and can cause thicker, stickier mucus resulting in decreased lung function!! In my experience, Powerade, Gatorade, or any similar drink that replaces electrolytes lost during exercise does a fantastic job hydrating CF bodies and replenishing calories during and after exercise (or anytime in between!)... there is just something that water does not accomplish that these drinks do.

By the way, the above advice applies to all people- not just those with CF!

Thanks for your question, I hope this has helped!

Aileen Vizel, RD, CDN

I had heard you speak at CF Society's support event in the summer and you mentioned several clinical trials that were either currently in progress or were scheduled to take place. Do you have any updates since then?

-Name withheld to maintain privacy

Pessy Schlafrig Responds:

Sure. For those who are unfamiliar with this topic, here's a brief overview. In people with cystic fibrosis, the mutation of the CFTR gene leads to abnormalities of the sodium channels within the cell. This is the root cause behind CF's difficulties. When the FDA gave their approval for Kalydeco (also known as Ivocaftor), people living with CF went from managing their systems using different medications and therapies to using a drug that targets the mutations of the CFTR gene. These drugs are meant to improve the CFTR mutations, thereby improving the symptoms of the disease. Although the original drug has only proven to help patients with gated mutations (G551D) , two recently completed trials haves shown that a combination of Kalydeco and VX-809 works in people with a double copy of the Delta F508 gene- the most common genetic mutation in cystic fibrosis. Vertex, the company developing these drugs, has announced that they expect FDA approval sometime in 2015. The word is not yet out if these drugs will be available for compassionate use. If you have a double copy of the "delta gene," please ask your doctor to keep you updated with the latest developments.

Pessy Schlafrig

My daughter has CFRD. Recently, I read something about a "bionic pancreas." What exactly does it do and is this something that can benefit someone with CF, like my daughter?

-Name withheld to maintain privacy

Pessy Schlafrig Responds:

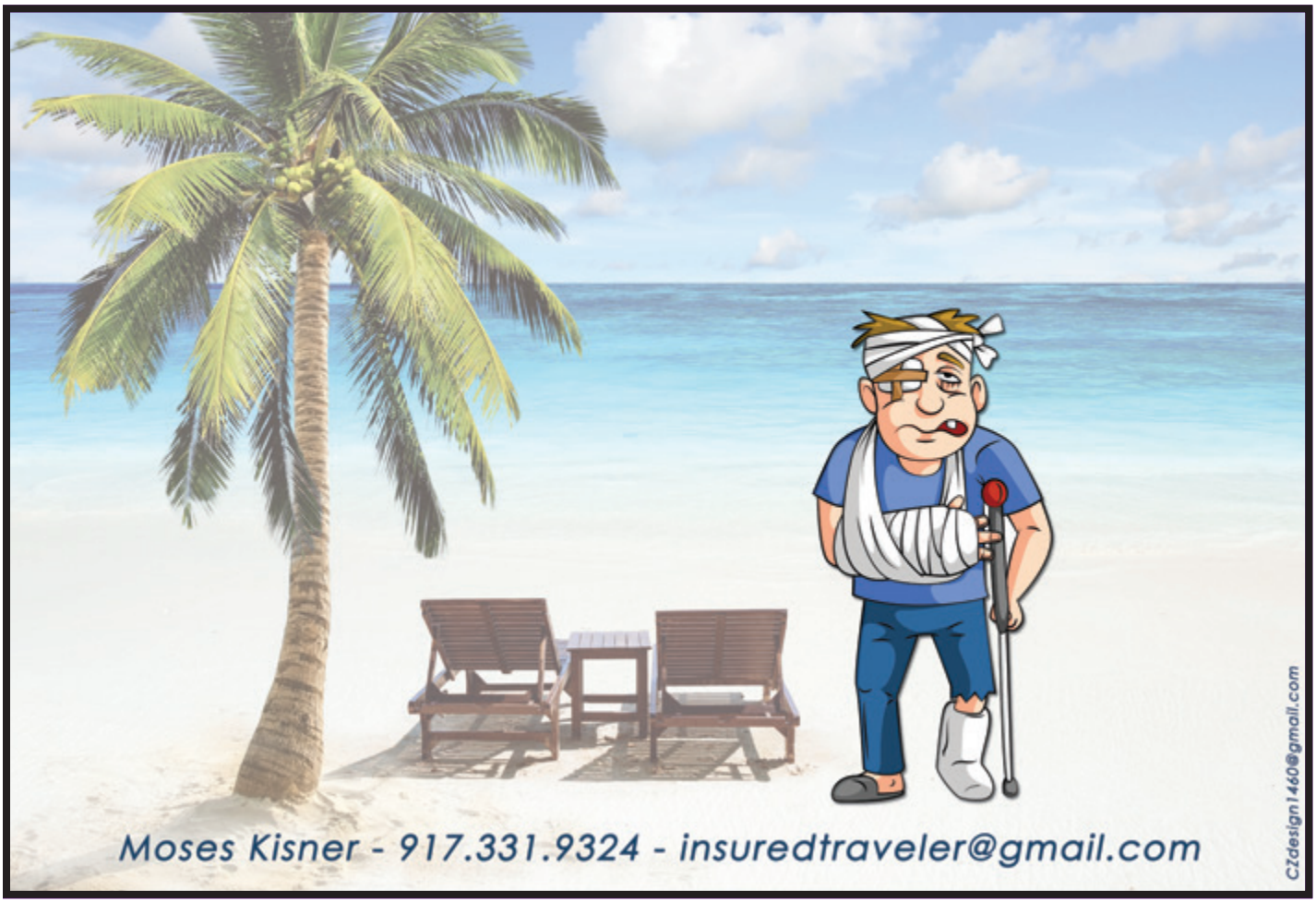
For people suffering from Cystic Fibrosis-Related Diabetes (CFRD), the development of the "bionic pancreas" might make carb counting, finger sticking, and manual monitoring of glucose a thing of the past. The new technology uses a smartphone-like method to arrange for consistent glucose readings and insulin administration without patient involvement. This is all done electronically, with no need for the patient to worry about self-monitoring their sugar levels and insulin needs. Basically, the bionic pancreas mimics the performance of a normal pancreas. This device is still being tested in clinical trials and the company developing it is expecting it to be submitted for FDA approval in 2017.

Pessy Schlafrig

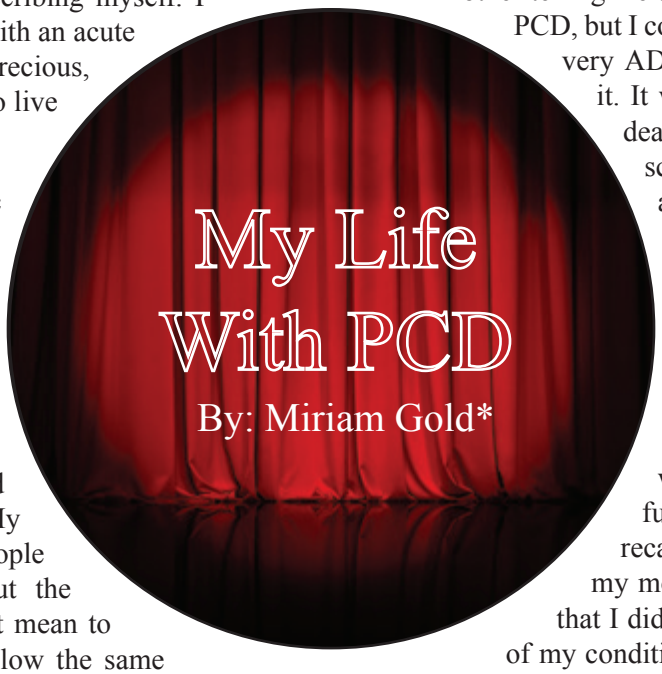
To submit a question, email us at cfsocietyorg@gmail.com.

People who think they know everything are a great annoyance to those of us who do.

I have ensominia; the inability to spell because I am too tired.



Guest Columnist



People use one word to describe me. Workaholic. This is due to the lengthy hours I put into my schooling, my full-time job, my part-time job, and post-masters certifications and trainings. I'm also a devoted daughter, sibling, aunt (my favorite role by far) and friend. However, I have a different way of describing myself. I just view myself as a person with an acute understanding that time is precious, and that I have an obligation to live life to its fullest.

I was born with a rare genetic condition called Primary Ciliary Dyskinesia, which basically means there is a defect in the cellular structure of my cilia. This causes the cilia not to work properly, which in turn makes me vulnerable to harmful bacteria and upper respiratory infections. My symptoms mirror those of people with Cystic Fibrosis (without the digestive issues- sorry, I don't mean to make you envious), and I follow the same treatment protocol at a CF center.

I'm also part of a subset of people with PCD who have a condition called Situs Inversus Totalis. This means that my internal organs are flipped to the opposite side symmetrically. So, for example, my heart is on the right side instead of on the left. It actually gets kind of fun when someone examines me for the first time and I "forget" to tell them my heart is on the other side. I like to watch them squirm a little bit before I share this little factoid of: "OMG, I'm sorry but my heart is on the other side!" Hehehe, my own little passive aggressive way of dealing. Basically, to wrap it up, people like me are one in a million, and our hearts are in the RIGHT place!

For the first two decades of my life, I was followed by an allergist. All I remember contending with was coughing, ear infections and sinus infections. Growing up, I wasn't aware of my condition. My parents felt that it was best to hide it to ensure the most normal childhood possible. I do have to admit that I had a regular childhood and didn't feel any different from my peers. I was a great student, had an active social life, and participated in every school and camp activity. Whatever I lacked in physical strength, I made up for in determination. (Except when I had to help in the house … I was actually able to create just the right shade of pale on my face to ensure that I would get away with doing anything domestically related! My siblings still haunt me about this until this very day….).

At some point in my teenage years, I vaguely remember my mother telling me that I had this condition called PCD, but I conveniently filed it away in my very ADD brain and forgot all about it. It wasn't something I wanted to deal with. Instead, I focused on school plays, extra-curricular activities and hanging out with my friends. I also remember forcing myself to take lifeguarding lessons when I was 15. It was my way of proving that I was in perfect health.

The turning point for me was when I started college and a full-time job simultaneously. I recall having a conversation with my mother in which I informed her that I didn't think I was "growing out" of my condition. (I really don't know what made me think I was EVER growing out of it… I must have been delusional!) In fact, I thought I was getting worse. The daily grind was turning into a daily struggle, and I feared that I would have to put my personal and professional life on hold. Well, after some extensive research, we made our first ever appointment with a CF specialist- and the life I knew dramatically changed.

I was introduced to new treatments and equipment. Words like 'vest, flutter, nebulizer, TOBI, and PICC line' made their appearance. It was as if some unwanted guests came to stay in my home without my permission. The constant prevalence of these treatments, and the fact that I actually had to acknowledge that PCD was real, and here to stay, was devastating to me. While I couldn't deny the efficacy of airway clearance and inhaled treatments, it was a huge adjustment and a difficult one to accept. I was used to being the disorganized, spaced out, and flaky sort. I knew nothing about planning ahead, never mind organizing my life around so many treatments. It was perfectly normal for me to go without eating and sleeping, especially if I was involved in a professional or creative project. I even have memories of performing on stage with high fever, coughing my brains out in between each scene, and thinking nothing of it (actually, I was pretty proud of it… boy, was I twisted!). This condition totally invalidated my na-

ture, and I felt that my very essence was being challenged.

There is no question that my emotions manifested in the way that I went about maintaining my daily regimen. I told myself that I would do the least that needed to be done, and not more. My heart wasn't in it, and I was totally resentful of the time and effort the treatments took out of my daily life. I remember having conversations with my doctor, in which she told me that my health would improve if I gained weight. I remember nodding my head politely, while thinking: "Is she kidding me??? Being thin is the only perk I get out of this entire business!"

I would work on assignments and papers while doing the vest and nebulizers, thus ensuring that the treatments had a double negative connotation! I didn't take care of my equipment and would leave it lying around haphazardly. I will never forget the time I heard strange noises coming from my room during a family party. I slowly opened the door and was met with the most bizarre sounding symphony, compliments of my nieces and nephews! They were tooting on the flutter, bellowing into the mouthpiece of my nebulizer, and singing their hearts out while wearing my vibrating vest!

I remember having conversations with my doctor, in which she told me that my health would improve if I gained weight. I remember nodding my head politely, while thinking: "Is she kidding me??? Being thin is the only perk I get out of this entire business!"

It took a tremendous amount of learning and discipline to carve PCD into my existence. I had to come to the realization that in order for me to live the best life and do my best work, I had to honor my condition, first and foremost. At this point, I could safely say that things have come to a more balanced flow, and I'm at peace with my situation. (Except for when I can't find a parking space and I'm in a rush… then I start wailing like a banshee!) In this vein, please allow me to share some valuable lessons that I have been privileged to learn along the way:

Obvious competency is good most of the time- but maybe not all of the time. As others may tell you, I look like the picture of health (I'm not bragging, I'm simply saying....). I have always put an emphasis on projecting an energetic and charismatic front to my friends, acquaintances and workmates. I have high expectations for myself and do whatever it takes to reach them. It's not a bad thing. I'm a respected professional and member of my community. My friends and family ask me for favors and advice round the clock. I'm so busy that I literally don't get a moment to breathe (no pun intended). I constantly have to remind myself that I can't say yes to everyone and everything, especially if it will get in the way of my health. This is something that I need to work on continuously.

Don't shortchange yourself. When I completed my second Master's degree, I had received the "highest academic achievement" and "excellence in field" awards. I was also nominated to be commencement speaker. I stood in front of thousands of graduate students and realized how far I'd come. I had completed this degree while working at an intense job, and then went straight from my job to a full-time internship, and then went on to classes at night and every Sunday (oh, and don't forget my daily treatment regimen). The honors and awards weren't a result of taking the easy way out, nor a result of looking for excuses. This came from looking in the mirror every morning and making a commitment to myself to do the absolute best I can (okay, this also came from drinking insane amounts of coffee...). We must make goals for ourselves and do everything humanly possible to achieve them.

In order to have good friends, you need to be a good friend. I have, thank G-d, been blessed with a network of supportive friends who have been there for me through thick and thin. While, for the most part, I have chosen to keep my condition private, I felt it was important for me to share this integral part of my life with close friends. They have a right to know why I suddenly opt out of trips, planned get-togethers and shopping expeditions. I feel that if a friend is intuitive, sensitive and confidential, I can tell them about my condition. I have never experienced a time that this information wasn't well-received, and I have never regretted my decision to self-disclose. In addition, I

Guest Columnist

look for ways that I could invest in my friends, rather than focus on receiving from them. I am able to rejoice in my friends' good fortune, and always look upon them with a good eye. I take genuine interest in every aspect of their lives and they, in turn, reciprocate.

I am not here in this world to get what I want. I'm here to do what is required of me. PCD has shown me that I am not entitled to anything. I am not even entitled to the air I breathe. The only thing I am entitled to is to live a life well-lived. In the past few years, I have developed some other medical conditions- totally unrelated to PCD. When I have time to think (don't leave yourself too much time to think!), my medical issues do have a way of making me feel a little down and vulnerable… okay, sometimes a lot down and vulnerable! During these times, I have begun to think that if I was meant to go through these hardships, I should at least be able to learn from them and accomplish my ultimate, unique role in this world (or sometimes I just invest in some really expensive retail therapy… y'know, whatever works!).

Asking for help is as aversive to me as coughing up sputum into a specimen cup.

It is okay to ask for help. Asking for help is as aversive to me as coughing up sputum into a specimen cup (sorry to get so graphic but I need you to get the picture)! There is a certain amount of vulnerability that comes along with asking for help, and it definitely isn't in sync with my goal of "obvious competency." However, we can't always be on the giving end, and people were created to rely on each other. Inasmuch as I hate taking from others, I'm beginning to learn how to be a gracious taker. I've come across some amazing individuals who are so eager to help, that I almost feel like I am doing them a favor by asking for their assistance! This is okay and this is good (as you can tell I've been doing a lot of self-talk in this area!). Yup, sometimes being strong means knowing when and how to ask for help.

Never take ANYTHING or ANYONE for granted. How blessed am I to be constantly aware of the awesome wonder of one simple breath. If given the choice, I would never give up the precious gifts and insights that I have gained by dealing with this condition throughout the course of my life. I sincerely feel that I would not have come upon these realizations on my own. I also want to pay special tribute to my family. When I think about what they mean to me, it brings tears to my eyes. I have infinite gratitude to my parents, who are willing to go to the moon and back for me. I also cannot thank my siblings enough for their love and concern. They constantly make me feel part and parcel of their lives. May G-d continue to grant us all good health and happiness. I feel truly blessed.

* Name has been changed to protect privacy

The writer can be contacted through the offices of CF Society.

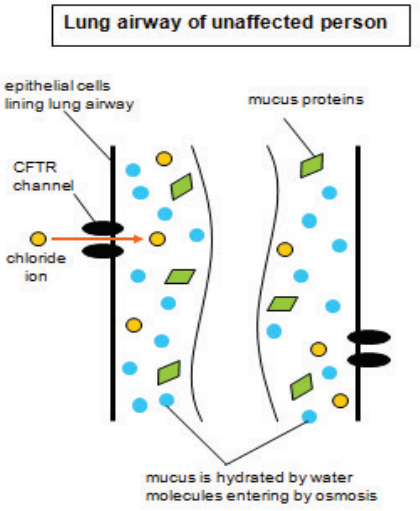
THE BOTTOM LINE

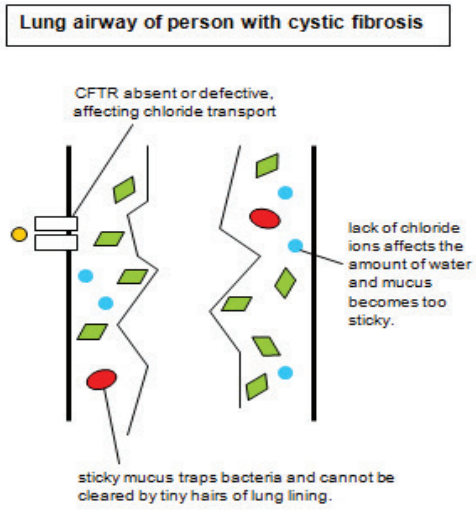
Bringing you recent breaking news and updates pertaining to patients with debilitating lung diseases

COPD Drug Also Shows Promise For Cystic Fibrosis Patients

Data supporting a promising new treatment for CF, developed by Verona Pharma, was presented for the first time at the 28th Annual North American Cystic Fibrosis Conference (NACFC) in Atlanta, Georgia on October 9-11, 2014.

Verona Pharma's key molecule, RPL554, is currently being evaluated in a phase two clinical trial for the treatment of COPD (chronic obstructive pulmonary disease), but the company also believes that the therapy can treat CF as well. Cystic fibrosis is caused by mutations in the CFTR (cystic fibrosis transmembrane conductance regulator) gene that results in the defective transport of ions across the membrane of epithelial cells, particularly in the lungs. RPL554 can thus activate CFTR in CF patients.





Professor John Hanrahan, Director, CF Translational Research centre at McGill University, commented, "In our experiments, RPL554 increased the activity of CFTR, ion channels on the surface of cells obtained from the lining of the airway. In cystic fibrosis patients it is the dysfunction of these ion channels, as a result of genetic mutations, that is responsible for the symptoms of the disease. We will continue to examine this effect of RPL554 in further studies. Ultimately, if found effective and safe in cystic fibrosis patients, RPL554 could emerge as a new medicine for this debilitating disease."

Dr. Jan-Anders Karlsson, CEO of Verona Pharma, noted, "We will now seek to build on these findings by testing the activity of RPL554 in patients with this orphan disease. We are currently focused on progressing RPL554 in phase 2 clinical trials for COPD, initially positioning it as a novel treatment for acute exacerbations of the disease. We are also building a broader franchise around this drug to maximize its value, both to patients and to investors. We are therefore exploring the potential of the drug in different diseases as well as in the multi-blockbuster markets for COPD and asthma maintenance therapy. The results outlined in this NACFC presentation suggest another tangible opportunity for us to explore."

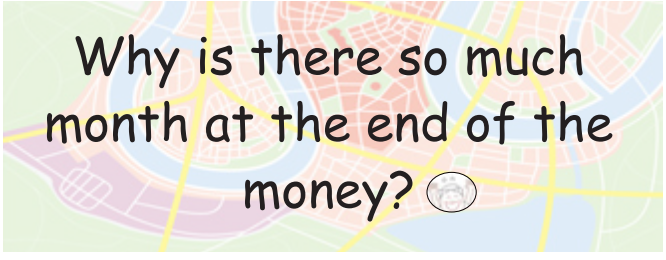
Please see source:
http://cysticfibrosisnewstoday.com/2014/10/01/rpl554-emerging-as-viable-cystic-fibrosis-therapy/

THE BOTTOM LINE

Verona Pharma's key molecule, RPL554, is currently being evaluated in a phase two clinical trial for the treatment of COPD (chronic obstructive pulmonary disease) and appears to be a promising new treatment for CF

Where CF is caused by mutations in the CFTR (cystic fibrosis transmembrane conductance regulator) gene, RPL554 increases the activity of CFTR and can thus activate CFTR in CF patients

Verona intends to explore the potential of this drug in different diseases; they presented this finding for the first time at the NACFC in Atlanta, Georgia this October



THE BOTTOM LINE

Progress in Treatments For Superbugs Impacts Patients With Lung Disease

A team of researchers from the Agency for Science, Technology and Research's (A*STAR) Institute of Chemical and Engineering Sciences (ICES) and the National University Hospital (NUH) is working toward returning efficacy to drugs that treat respiratory system infections and antibiotic-resistant superbugs. The goal of the team is to combine drugs to combat bacteria that threaten to infect the respiratory system or agitate bacteria-linked pulmonary diseases including pneumonia, bronchiectasis, and cystic fibrosis.

"Novel ways to deliver antibiotics to kill bacteria in the lungs and airways are important at a time when the population is aging and more people are expected to suffer from different kinds of respiratory infections in the future," said Raymond Lin, PhD, from the Department of Laboratory Medicine at NUH, in a news release from A*STAR. "The next crucial step will be to translate laboratory findings to clinical application."

The combination utilizes antibiotics and muco-active agents to kill bacteria, such as Pseudomonas aeruginosa that predominantly affects cystic fibrosis patients, in a one-two punch. First, the muco-active agents acts to disrupt bacterial cell-cell communication by disrupting the protective mucus layer, and then the antibiotic agent directly kills bacteria. According to the news release, bacteria are destroyed completely, and the overall treatment works twice as fast as current leading-edge antibiotics.

An added benefit of the treatments is their inhalable route of administration. "Making the formulation inhalable and portable not only delivers a higher concentration of the drug to the lungs but also gives the added potential to be an effective out-patient treatment alternative," said Dr. Desmond Heng, principal investigator at ICES. "Furthermore, if the disease is well-controlled in an outpatient setting with no further progression, costly hospitalization could be avoided."

Importantly, this treatment scheme minimizes the chance for antibiotic resistance, a common problem of current antibiotic treatments. Moreover, the combination therapy is proposed to be effective against bacteria that have become resistant superbugs. The team at A*STAR has patented three drug formulations of three different antibiotics designed to fight against bacteria. All formulations can reduce infection by resistant bacterial strains of P. aeruginosa and Klebsiella pneumoniae to a greater extent (up to five times) than conventional antibiotics. Accordingly, small doses may be prescribed, further limiting the risk for antibacterial resistance.

Please see source: http://lungdiseasenews.com/2014/09/16/progress-superior-treatments-superbugs-impact-pneumonia-bronchiectasis-cystic-fibrosis-patients/

THE BOTTOM LINE

A team of researchers from A*STAR, ICES and NUH is working on combining drugs to combat bacteria that threaten to infect the respiratory system or agitate bacteria-linked pulmonary diseases including pneumonia, bronchiectasis, and CF

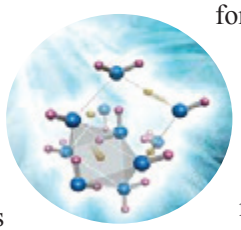
The combination first uses muco-active agents to disrupt bacterial cell-cell communication by breaking up the protective mucus layer, and then the antibiotic agent directly kills bacteria

The team at A*STAR has patented three drug formulations designed to fight against bacteria, with all capable of reducing infection by resistant bacterial strains of P. aeruginosa and Klebsiella pneumoniae to a far greater extent than conventional antibiotics

Molecular Hydrogen Can Protect Patients Against Pulmonary Hypertension

New research suggests oral administration of the antioxidant molecular hydrogen via hydrogen water may offer therapeutic value to patients with Pulmonary Hypertension.

Pulmonary hypertension (PH) is a condition caused by increased pressure in the pulmonary arteries. In advanced cases, its symptoms (shortness of breath, tiredness, chest pain) worsen and may limit all physical activity. The most-used therapies rely on vasodilators of several kinds. However, traditional treatments have failed to block the progress of disease effectively.



In patients with PH, there is a significant increase in reactive oxygen species (ROS), a condition named Oxidative Stress. Their accumulation can seriously damage cells, for which treatment with antioxidants has proven effective. However, since high doses of non-selective antioxidants (i.e., antioxidants that bind multiple receptors in several different areas in the body) can have detrimental effects (e.g. hemorrhage), selective antioxidants like molecular hydrogen (H2) are found to be a safer and more efficient therapy for PH patients.

THE BOTTOM LINE

H2 selectively reduces two specific ROS (hydroxyl radicals and peroxynitrite) without impacting what is now described as physiological ROS (e.g. ROS found to be beneficial and necessary for cells' survival).

In this study, the team found that H2 prevented the development of PH and reversed RV hypertrophy (thickened muscle around the heart's right lower chamber). Accordingly with previous studies, the therapeutic effect of H2 was related to its antioxidant and anti-inflammatory activities. Additionally, though both H2 delivery methods (intraperitoneal injection and oral administration) were equally effective, the authors proposed using oral administration in the treatment of Pulmonary Hypertension since it proves less expensive and offers a longer-release time.

Please see source: http://pulmonaryhypertensionnews.com/2014/09/26/molecular-hydrogen-water-protects-pulmonary-hypertension/

THE BOTTOM LINE

Research shows oral administration of molecular hydrogen (H2) is effective in treating Pulmonary Hypertension (PH)

(PH) is a condition caused by increased pressure in the pulmonary arteries that results in debilitating symptoms of chest pain, fatigue, and shortness of breath

In the study, H2 was found to prevent the development of PH and actually reverse RV hypertrophy

By Distracting Antibodies, Pseudomonas Can Cause Bronchiectasis

One of the obstacles that pharmaceutical companies and researchers face in the development of new therapeutics is bacterial mutation. Some medications take, on average, a decade of testing and rigorous filing for regulatory approval, only to be met with evolved and tougher strains of bacteria that will only be sensitive to a new formulation. A team of scientists from the University of Birmingham in England recently discovered a new bacterial defense mechanism that may offer them the ability to neutralize antibodies and use them to their advantage in order to advance new medications.

A Pseudomonas infection can be difficult to treat and can inflict significant lung damage, especially in people with impaired airway clearance such as cystic fibrosis and bronchiectasis. Bronchiectasis can result from a prolonged, poorly managed infection, and it manifests as a persistent cough, accompanied by shortness of breath and chest pain. A respiratory infection from Pseudomonas aeruginosa is a serious concern among individuals with cystic fibrosis (CF), as well.

In this study, researchers analyzed blood samples from bronchiectasis patients with an active Pseudomonas infection and reduced lung function. They found elevated levels of IgG2 in the patients' systems, which rendered the immune system useless against the bacteria. These specific antibodies attached themselves to sugar chains along the bacteria's surface, "distracting" bactericidal complement proteins and helping preserve the bacteria. This discovery of antibodies having more affinity to bacterial sugar chains prompts many questions in the research and development of antibiotics, vaccines, and immunotherapy.

In related news, clinical stage biotechnology company GlycoMimetics, Inc. develops drugs that mimic the molecular structure of carbohydrates involved in important biological processes. Their leading pipeline treatment for this infection is GMI-1051 – formulated to target specific virulence factors that determine the bacteria's growth and resistance, In studies that involved animal models, this treatment was able to enhance the body's immunity, clearance of the bacteria, and odds of survival compared to treatment based solely on use of antibiotics.

Please see source: http://lungdiseasenews.com/2014/09/24/pseudomonas-leads-to-bronchiectasis-by-distracting-antibodies/

THE BOTTOM LINE

In seeking to combat bacterial mutation, scientists discovered a new bacterial defense mechanism that may lead to the formulation of new medications

They found elevated levels of IgG2 antibodies in bronchiectasis patients with Pseudomonas infection and reduced lung function

These antibodies attach themselves to sugar chains along the bacteria's surface, "distracting" bactericidal complement proteins and rendering the immune system useless against the bacteria

THE BOTTOM LINE

Tannic Acid May Help CF Patients Recover From Bacterial Lung Infections

From an early age, the lungs of individuals with cystic fibrosis (CF) are colonised and infected by bacteria, a common example of which being Staphylococcus aureus (S. aureus). Researchers from the University of Pennsylvania and the Howard Hughes Medical Institute previously showed that an enzyme called Sphingomyelin phosphodiesterase C (SMaseC) produced by the S. aureus bacterium may harm the health of CF patients. Now, they have discovered an inhibitor for this pathogenic bacterial enzyme.

Scientists saw that the SMaseC enzyme suppresses CFTR channel activity in these experimentally modified frog oocytes, and also in a human lung cell line. The problems originating from genetic defects in CFTR channels are likely made greater if the enzyme reduces the function of the CFTR channel even further. SMaseC also suppresses a type of voltage-gated potassium channel, known as the Kv1.3 channel, in immune cells. Suppression of these potassium channels is known to weaken host immunity, which would make it more difficult for the CF patients to recover from lung infections.

To try and counteract the effects of the enzyme, the researchers went on to test a collection of over 2,000 approved drugs and natural products in a chemical library. They found that tannic acid -- a readily available and inexpensive natural product that has been used to treat disease as far back as 1850 -- stopped SMaseC from having a negative effect on both the CFTR and the Kv1.3 channels. "We hope to test whether the application of the SMaseC inhibitor tannic acid, in conjunction with effective antibiotic treatment and supportive measures, will provide a significant therapeutic improvement over current treatments for cystic fibrosis," Dr. Zhe Lu, the senior author, says. His team is also working hard to understand the exact mechanism by which tannic acid counters the negative actions of SMaseC.

Please see source: http://www.sciencedaily.com/releases/2014/10/141014152538.htm

THE BOTTOM LINE

Researchers, having previously shown that an enzyme called SMaseC produced by the S. aureus bacterium may harm the health of CF patients, have now discovered SMaseC's inhibitor

Working with frog eggs and human lung cells, scientists found that SMaseC suppresses CFTR channel activity and a potassium channel called Kv1.3 that negatively affects the immune system

Upon discovery that tannic acid stopped SMaseC from having a negative effect on both the CFTR and the Kv1.3 channels, scientists are working on how tannic acid can help treat CF

THE BOTTOM LINE

Antimicrobial CSA-13 Proven Effective Against Psuedomonas Aeruginosa Biofilm

N8 Respiratory LLC, an emerging respiratory therapeutics company focused on treatment of chronic cystic fibrosis pulmonary infections, announced new results from a preclinical study demonstrating its lead compound CSA-13's efficacy as an antimicrobial peptide mimic against Pseudomonas aeruginosa. The study was presented as a poster at the North American Cystic Fibrosis Conference (NACFC) in Atlanta, GA.

The study measured efficacy and the MIC of CSA-13 and tobramycin when combined with standard and tobramycin-resistant strains of P. aeruginosa. Sputum of cystic fibrosis patients was also added to each treatment to determine the impact of biofilm on each treatment. Results showed that the minimum inhibitory concentration (MIC) of CSA-13 was unchanged in the presence of sputum from CF patients, while the MIC of tobramycin (the most common antibiotic for pulmonary P. aeruginosa infections) increased significantly in the presence of sputum from CF patients. CSA-13's MIC also remained unchanged whether tested in a tobramycin susceptible, or a tobramycin resistant strain.

"This is an encouraging study, as it demonstrates the ability of CSA-13 to remain effective even in the presence of sputum from a cystic fibrosis patient," said Paul B. Savage, MD, Department of Chemistry and Biochemistry, Brigham Young University. "Further, it confirms previous findings that the compound may continue to be effective even in antibiotic-resistant strains of P. aeruginosa."

Please see source: http://globenewswire.com/news-release/2014/10/09/671995/10101941/en/N8-Respiratory-Presents-Data-Demonstrating-Antimicrobial-Efficacy-of-CSA-13-Against-Psuedomonas-Aeruginosa-Biofilm.html#sthash.MYOj2wWa.tYwW7EVE.dpuf

THE BOTTOM LINE

- N8 Respiratory LLC announced results from a preclinical study demonstrating CSA-13's effectiveness as an antimicrobial peptide mimic against Pseudomonas aeruginosa
- The study measured efficacy of CSA-13 and tobramycin when combined with standard and tobramycin-resistant strains of P. aeruginosa and analyzed the sputum of cystic fibrosis patients to determine the impact of biofilm on each treatment
- Successful findings were presented at the NACFC in Atlanta, Georgia this October

Is CF Patient Lung Function Higher in US than UK? YES!

Young adults and children with cystic fibrosis in the United States have better lung function than those who live in the United Kingdom, despite the fact that both countries have well-developed healthcare systems. Differences in lung function may be a result of differences in healthcare structure, according to the authors of "Children and Young Adults in the USA Have Better Lung Function Compared with the UK," which was published in the journal BMJ Thorax.

"At this stage there is a lot more work to do to identify the cause of the differences," stated Dr. Diana Bilton, Chair of the UK Cystic Fibrosis Registry steering committee, in a news report. "It is important that we all look at our practice... check whether we are using the medicines already available in the best way. We also need to look at how we deliver care."

Dr. Bilton's comments were fueled by an analysis of 2010 data from the US and the UK involving cystic fibrosis patients aged six to twenty-five years. Lung function was 3.31% higher in US patients, which may be a result of medication and routine medical practices.

In the United States, it is common for patients to be treated only at specialist centers, whereas in the United Kingdom, patients generally see a specialist once a year and see a pediatrician, rather than a cystic fibrosis expert, in the interim. "Comparing clinical outcomes between countries can be informative where clear differences in care models and treatment approaches occur and it is important that we learn from other countries," stated Janet Allen, Director of Research and Care at the Cystic Fibrosis Trust.

THE BOTTOM LINE

On top of frequent specialized care, American patients receive different therapies than those in the United Kingdom. Chronic pulmonary therapies and chronic macrolide antibiotics are used more often in the United States, and the use of hypertonic saline and rhDNase is most strikingly different.

Although the data was from 2010, which allows time for changes in healthcare that may have evened out the imbalanced lung function by the current year, the report identifies the potential need for more aggressive treatment of cystic fibrosis in the United Kingdom.

Please see source: http://cysticfibrosisnewstoday.com/2014/09/29/cf-patient-lung-function-higher-us-uk/

THE BOTTOM LINE

- Young adults and children with CF in the U.S. have better lung function than those who live in the UK
- Differences in lung function may be a result of differences in healthcare structure
- On an observational note, findings were based on analysis from four years ago, from 2010 data gathered from the US and the UK; constructive changes may have already been made

On New Medications

New Orphan Drug Targeting F508delta Mutation Being Developed By ProQR Therapeutics

ProQR Therapeutics B.V., a biopharmaceutical company based in Leiden, Netherlands and founded in 2012, is developing RNA-based therapeutics for the treatment of genetic disorders. They recently announced their stock market listing, raising approximately $98 million toward the development of their new drugs.

ProQR Therapeutics' lead candidate is QR-010, a RNA-based oligonucleotide for the treatment of Cystic Fibrosis (CF). Per the European Medicines Agency's (EMA) website, QR-010:

> " QR010…. is an 'anti-sense oligonucleotide', a very short piece of synthesized RNA (a type of genetic material involved in the production of proteins). This anti-sense RNA specifically attaches to the 'sense' RNA with the F508delta mutation which is responsible for the production of the abnormal CFTR protein in cystic fibrosis. As a result, the anti-sense RNA is expected to induce the repair of the genetic RNA abnormality, leading to the production of a fully functional CFTR protein."

ProQR Therapeutics plans on filing an FDA Investigational New Drug (IND) application by the end of 2014 with a Phase Ib clinical trial to follow. ProQR Therapeutics is targeting the DF508 CF mutation, which is the most prevalent mutation comprising about 70% of all CF patients.

In August 2014, Cystic Fibrosis Foundation Therapeutics (CFFT), a subsidiary of the Cystic Fibrosis Foundation (CFF), entered into an agreement with ProQR Therapeutics to provide up to $3 million to support the clinical development of QR-010.

Please see source: http://orphandruganaut.wordpress.com/2014/09/22/cystic-fibrosis-proqr-therapeutics-ipo/

THE BOTTOM LINE

- ProQR Therapeutics is developing a new orphan drug called QR010
- QR-010 is an RNA-based therapy that repairs the abnormal CFTR protein found in CF, targeting treatment for those with the F508delta mutation
- ProQR Therapeutics plans to schedule a Phase Ib clinical trial in a few months

THE BOTTOM LINE

Using Aerobika OPEP Effectively Treats Bronchiectasis, Cystic Fibrosis, and COPD

A recent study conducted at the Robarts Research Institute at Western University in London, UK, demonstrated the effectiveness of the drug-free Aerobika device for the treatment of chronic obstructive pulmonary disease (COPD), cystic fibrosis (CF) and bronchiectasis after three weeks of use every day. The device was developed and commercialized by Monaghan Medical Corporation and is used by many leading hospitals in the United States.

The study demonstrated that patients using Aerobika daily for three weeks increased mucus clearance, decreased cough frequency and breathlessness, and enhanced exercise tolerance. In addition, the scientists also discovered that the device induces an overall increase in the quality of life without side effects, as reported by the patients themselves who tested the device.

The researchers assessed Aerobika's effectiveness through the Pulmonary Function Test, Six Minute Walk Test, the St. George's Respiratory Questionnaire (SGRQ), the Patient Evaluation Questionnaire (PEQ), and Hyperpolarized Helium-3 Magnetic Resonance Lung Imaging (3He MRI). The results of the study corroborate a different study conducted by Trudell Medical International (TMI), which revealed the safety and effectiveness of Aerobika for the treatment of COPD.

The Aerobika Oscillating Positive Expiratory Pressure (OPEP) device is a treatment that does not require any drugs, but uses a proprietary pressure-oscillation dynamic, which is able to offer intermittent resistance, as well as positive pressure and oscillations at the same time. With these movements and pressure, the device releases and clears mucus, unclogging the airways. The device was recently granted the Gold medal at the Medical Design Excellence Awards (MDEA), a contest that recognizes innovative medical devices that are able to improve patients' care and quality of life.

Please see source: http://lungdiseasenews.com/2014/10/03/robarts-research-institute-confirms-aerobika-opep-effectiveness-treatment-copd-bronchiectasis/

THE BOTTOM LINE

- The Aerobika Oscillating Positive Expiratory Pressure (OPEP) device is an effective treatment for airway clearance that does not require any drugs
- The device uses a proprietary pressure-oscillation dynamic, which is able to offer intermittent resistance, as well as positive pressure and oscillations all at the same time
- The study demonstrated that patients using Aerobika daily for three weeks increased mucus clearance, decreased cough frequency and breathlessness, enhanced exercise tolerance, and had an overall increase in the quality of life without any side effects

Device For Cystic Fibrosis Care Improved Using Open Design and 3D Printing

A collaborative design effort to create a dispensing device for medicines used to treat the genetic disease cystic fibrosis (CF) was spearheaded by researchers in the UK. The team – from Sheffield Hallam University, the University of Sheffield and the CF unit at Northern General Hospital – enlisted the aid of patients in the design of the new dispenser, which aim to overcome some of the barriers to treatment with Creon, an enzyme preparation that is used to help CF patients digest food.

Creon (pancrelipase), and other such pancreatic enzymes, are taken in capsule form alongside meals and mixes with food in the stomach, helping individuals with CF to extract the vital nutrients and energy they need. At the moment, Creon capsules are supplied in a large pot somewhat reminiscent of a hockey puck. The container is big, bulky and rattles, which may not be a problem when eating at home but is not desirable when dining out, particularly as several capsules may need to be taken each meal. Patients sometimes transfer the capsules to other more discreet containers such as Altoids tins, but these do not help them keep track of the many pills that need to be taken every day, which can be more than a dozen in some cases.

THE BOTTOM LINE

"Creon use outside the home was identified as a vital issue, with novel Creon dispensers suggested as a potential solution," according to the researchers, led by designer Matt Dexter, who presented their work as a poster at the 37th European Cystic Fibrosis Conference in Gothenburg, Sweden, in June.

In fact, the overarching aim of the project was to discuss a variety of different CF-oriented 'products' that might be made in this way, but an improved dispenser for Creon was the most popular choice to take forward by those participating in the effort. Others under consideration included a treatment cabinet designed to hold all the treatment paraphernalia required for managing CF.

Various design ideas for the device were tossed about, and one – inspired by Pez candy dispensers – was taken through to multiple prototype stages and constructed using a MakerBot 3D printer. The prototypes were road-tested by the CF community and opinions were shared, allowing for various refinements to the design to be made.

All told, more than 500 people from across the world participated in the project, which eventually yielded a discreet, rattle-free dispenser that fits easily into a pocket or handbag, and delivers one capsule per push. In time, the design will also incorporate an electronic dose counter to help patients and healthcare professionals monitor adherence to treatment. And of course the dispenser is open-source, so the files are freely available on Thingiverse to download.

Please see source: http://3dprint.com/9730/3d-printing-cystic-fibrosis/

THE BOTTOM LINE

A new CF-oriented device was collaboratively created and tested on more than 500 people

The design is a rattle-free pancreatic enzyme dispenser for discreet use when out among other people

It was made using a 3D printer and is an open design, meaning it is available for free download

On Laughter

Join A Yoga Class And Laugh Your Worries Away

In 2008, Lainie Diamond was living in New York and was wondering where her laughter went. She discovered a yoga instructor named Vishwa Prakash who wasn't teaching the typical stretching and stances most people associate with the ancient exercise system for body and mind. He was teaching how to laugh, regardless of if students were in the mood.

Laughter yoga is an exercise routine founded in 1995 by an Indian physician, Dr. Madan Kataria. Prakash studied under Kataria and began offering laughter yoga classes in New York. Diamond joined Prakash's free class and- can you guess? Yes, soon she too wanted to help others find their laughter and became a certified laughter yoga instructor.

At its core, Diamond said, laughter yoga teaches people how to breathe. "We hear the phrase, 'Just breathe,' all the time," she said. "Breathing is very important for the body." As a professional singer, Diamond was already familiar with a variety of breathing techniques to help her achieve long notes. Through laughter yoga, she discovered the therapeutic value of breathing. "Music is my vocation and laughter is my life," she said. "Breathing can be healing. Laughter helps oxygenate your body and can change your brain chemistry."

A report by the Mayo Clinic suggests that giggles and guffaws have a number of short- and long-term benefits. Laughter, according to the clinic, enhances the intake of oxygen, which in turn stimulates the body's heart, lungs and muscles and increases endorphins released by the brain. Laughter is said to soothe tension by stimulating blood circulation.

Whereas negative thoughts result in chemical reactions that can increase stress and decrease immunity, laughter creates positive thoughts that result in release of neuropeptides, which are a type of chemical transmitter, to fight stress and illness, the clinic reported. Other benefits of laughter can include pain relief, better coping skills and an antidote for depression and anxiety.

"The body doesn't know a real laugh from a fake laugh," Diamond said. "One of our laugher yoga mottos is, 'Fake it 'til you make it.'" Just going through the motions with various "deep ho-ho-hos and ha-ha-has" can help oxygenate the body, she said. But, laughter yoga isn't all laughs. Those who take (the class) are able to express laughter, anger and for-

THE BOTTOM LINE

giveness through breathing exercises."

The participants in her class are often seen moving around, sometimes hugging themselves while laughing silently or out loud. It may look funny; however, Diamond said they are learning breathing techniques and activating various muscles. Another benefit of laughter, Diamond said, is that it can serve as glue bonding people together socially. "The effects of laughter yoga can be life-changing for people and affects their careers, their family life and their relationships," Diamond said.

Diamond said she has had a number of current and past students tell her how laughter taught through yoga techniques has changed their lives for the better. "It has a rippling effect in their personal communities," she said. "They go home and spread their laughter. They make their families laugh and it improves their relationships and they feel better."

Please see source: http://www.chron.com/neighborhood/bellaire/news/article/Yoga-class-lets-you-laugh-your-cares-away-5822463.php

THE BOTTOM LINE

Laughter yoga is an exercise routine that teaches people how to breathe using laughter

The Mayo Clinic reports that laughter enhances the intake of oxygen, soothes tension by stimulating blood circulation, and creates positive thoughts that result in release of neuropeptides to fight stress and illness

Because the body doesn't know a real laugh from a fake one, even just going through the motions with various "deep ho-ho-hos and ha-ha-has" can help oxygenate your body and change your brain chemistry for the good

I'm writing a book. I've got the page numbers done.

Navigating Nutrition

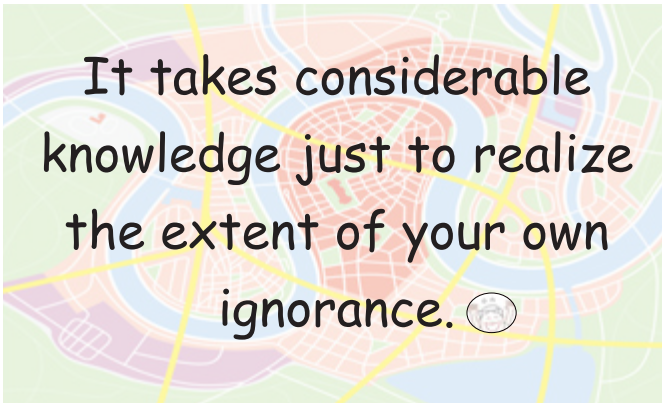
BACK TO BASICS

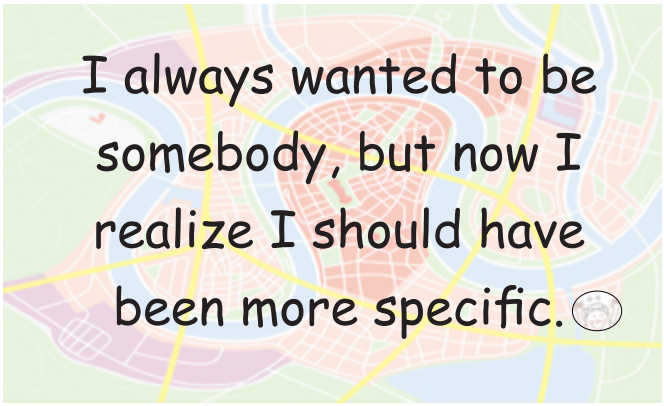
Hi everyone! Hope this article finds all our readers in good spirits and good health. With the holiday season both behind and ahead of us, with the "controlled chaos" that accompanies it coming and going, it certainly seems wise for us to make it a priority to refocus our attention to maintaining, or perhaps even improving, our health. On that note, I would like to begin our nutrition journey with an article about some basic, fundamental concepts in nutrition.

The United states government has put together a few illustrations that can help us follow appropriate eating guidelines and maintain optimal health. On the following page, you will find the food guide pyramid which is worth taking a closer look at, as it tells us how much and what type of foods should be consumed on a daily basis. Keep in mind that this information is intended for healthy individuals with no alternative nutritional needs. Should calorie needs increase (as they do in many CF cases) servings may also increase, but proportions should generally remain the same.

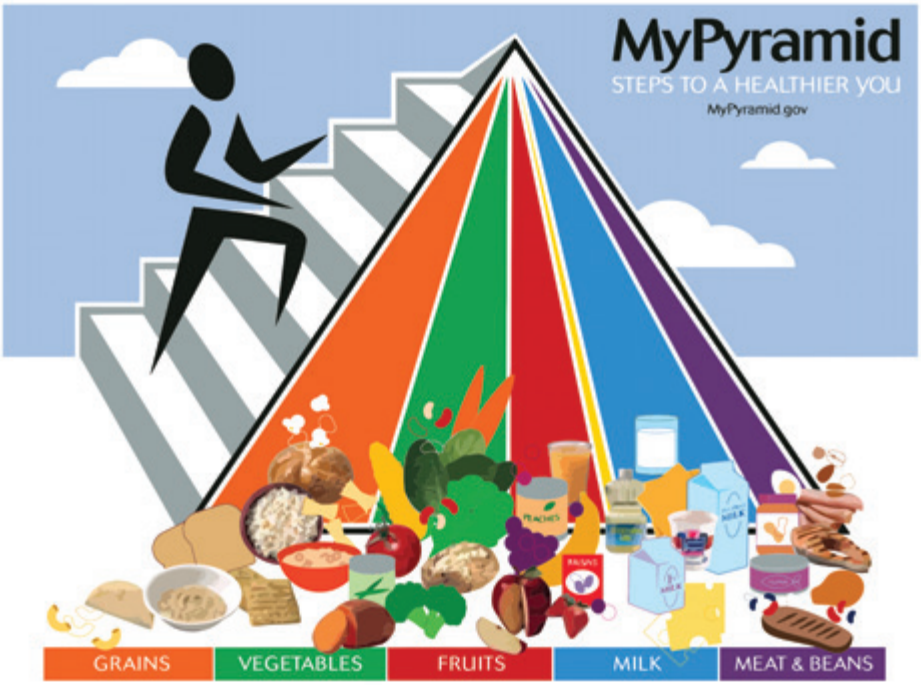
First published in 1980, the Dietary Guidelines are mandated by Congress to be reviewed, updated and released by the USDA and HHS every five years. The Food Guide Pyramid is an easy way to show the groups of foods and proportions you need to stay healthy. What you see next are the proportions from TOP TO BOTTOM for daily servings of the following foods, as listed on the following page:

Notice the guy climbing the pyramid- he is there to remind us that exercising at least 20-30 minutes daily is an integral part of staying healthy!





Navigating Nutrition



Fats, Oils & Sweets	(*smallest--yikes!*)
Dairy	Milk, yogurt & cheese group
Protein	Meat, poultry, fish, beans, eggs & nuts group
Vegetables	(*yum!- skin on is best, as most of the nutrients are found in the skin)*
Fruits	(*yum!- ditto with the skin*)
Grains	Bread, cereal, rice & pasta group (*try to keep it whole grain!*)

Notice the guy climbing the pyramid- he is there to remind us that exercising at least 20-30 minutes daily is an integral part of staying healthy!

Another wonderful illustration is called My Plate, which shows us the way our mealtime plates should look: (See illustration on the right.)

Please note that this is not a 10" plate! When we eat meals, we should be using a 7" plate... the smaller plate will fill up quicker, and visually will make us feel like we are eating more than we really are! Try it... it's such an easy change and can really make a difference in portion control. Again, this is for people without the need for extra calories and/or specific dietary needs. Should you happen to have CF (or have similar medical conditions) and need to gain weight, double up on those plates! Nevertheless, the proportions remain appropriate in most cases.

Aileen Vizel, RD CDN

Aileen can be contacted via telephone at 718-866-9000 ext. 104, or via email at nutrition1@cfsociety.org.

What happens to a frog's car when it breaks down?

It gets toad away.

Short Stories by M. Wiseman

The Neighborly Yorkie

It was a typical Tuesday afternoon. After a quick stop at the grocery to pick up necessities such as milk, eggs (and a bar of chocolate), Sarah was making a mad dash home before the kids' bus would arrive. She had four plastic bags strung over her shoulder and her purse balanced on an extended knee, while grappling for her keys, when she heard IT. The familiar "YOOOOOHOOOOO" from next door.

"Oh, please be calling someone else," thought Sarah as she attempted to unzip her purse with her teeth.

A "YOOOOOHOOOOO" like that always preluded an enthusiastic, endless conversation. From weather, to the wonderful neighborhood knitting association, to the absolutely darling new mailman, a "Yoohoo" opened a dialogue that entangled one in confusion and desperation. Sarah was always left rescuing herself with a plethora of creative excuses.

She was forgetting something... the package! The insulated package with David's pulmozyme that was supposed to be overnighted today!

"SARAH! SO NICE TO SEE YOU," the voice persisted, shrill and excited. "HOW ARE THINGS?" Mrs. Peters, you see, was under the misguided opinion that by talking loudly, neighborly goodwill could be more fully expressed.

"Mrrooh knoh, noral," Sarah answered, as with great skill she extricated her key ring and moved on to the task of jamming the correct key into the lock just by sheer force and tenacity.

"WHAT WAS THAT, DEAR?"

At this point, Sarah had gone around the key ring in a full circle. The first key she had tried mysteriously fit the second time around. The door clicked open.

"You know, normal. How are things with you, Mrs. Peters?" As soon as the question left her mouth, Sarah wished she could reach out and grab the words midair and stuff them right back down her throat. Her eyes glazed over and her shoulders sagged from the weight of her many bags, as Mrs. Peters launched into a blow-by-blow account of her morning walk with Suzy, her endlessly yipping Yorkie.

Suzy, as if knowing she was being loyally slathered with compliments, peeked her head out of Mrs. Peters' doorway and joined the conversation. Her shrill barks pierced through all coherent thought. Up and down the street, windows shut. Her frantic yelping and incessant yapping lent a catastrophic background to Mrs. Peters' shrill tone, like a cacophonic fugue.

"SUZY JUST MADE THE MOST CLEVEREST REMARK TODAY... YOU KNOW, THE POST WAS LATE... WEATHER WAS CLOUDY... SO MANY, MANY PACKAGES... WHAT A LINE... SUZY...SHE'S JUST THE MOST BEAUTIFUL DOG, ISN'T SHE... IT'S A BLESSING, I'M SO BLESSED, TRULY BLESSED... SHE'S SO INTELLIGENT... IT'S SO INTELLIGENT THE IDEAS SHE COMES UP WITH..." Mrs. Peters prattled on and on.

"Of course," Sarah smiled. A grimace really, but it could charitably be considered a smile.

"BEFORE I FORGET, I MUST GET YOU-"

"Really, I must get inside, before the kids-"

"OH, OF COURSE, THE KIDS! How's my little David doing? Hmmmm? Oh, he is so cute!"

Short Stories by M. Wiseman

"He is," said Sarah, and with a strained smile, and a wave of her hand from between her bags, she managed to extricate herself from the conversation.

It's not that Sarah minded Mrs. Peters; as far as neighbors go, she was quite amicable. But a mother has limited patience; the more it was spread, the less there was for everybody.
David and Mark would be home any minute, and supper needed to get on the stove so routine would not be derailed. It was hard enough as it was – dinner, homework, PJs, treatment…

It was only after she closed the door when her stomach lurched in a familiar sickening plunge. She was forgetting something… the package! The insulated package with David's pulmozyne that was supposed to be overnighted today! The medical supply company had promised!

There had been a box at her doorstep. Had the UPS guy decided not to leave it? Oh, for goodness' sake, she always told him to just leave it! It was too late to pick up the package now!... Unless she goes and drags David and Mark along with her right when they walk through the door, cranky and tired. But what other choice did she have?

She dumped her bags by the front closet and rushed outside. She pawed frantically through the old fliers at the bottom of her mailbox– there was no delivery ticket. A quick glance at her smartphone showed that there should have been. Great.

It was then that she looked up, only to see Mrs. Peters stepping onto her porch. "YOOHOO!" Mrs. Peters called out once again upon catching her eye.

"What is it this time," grumbled Sarah inside as she gave a half-hearted wave.

"YOU RAN IN SO QUICKLY, DEAR! I didn't have a chance to give you the package me and Suzy picked up for you."

"The package," Sarah repeated.

"YES, AS I WAS TELLING YOU! We found the ticket and Suzy just loves doing that sort of thing!"

Sarah blinked. "Of course," she said, "how neighborly of her."

Mrs. Peters chortled, "YES, SHE IS A SWEETHEART, BLESS HER TINY HEART. It was a lovely walk. Except for the rain..." She creakily bent down and picked up the small cardboard box.

Sarah grasped for the right words. "Thank you!" she said over and over again. "I can't thank you enough, really! Thank you, thank you."

"OH, DON'T BE SILLY," said Mrs. Peters. "YOU KNOW SUZY LOVES TO HELP!"

That night, as Sarah fell asleep, the excited yipping coming from next door was sheer music to her ears.

I asked a child with ADHD: "What does ADHD stand for?" He answered: "Attention Deficit -- Hey, Donuts!"

SPOT THE DIFFERENCES

The picture below has been altered in 26 ways. By examining the two pictures, can you find all 26 differences? (Answer on pg.25)

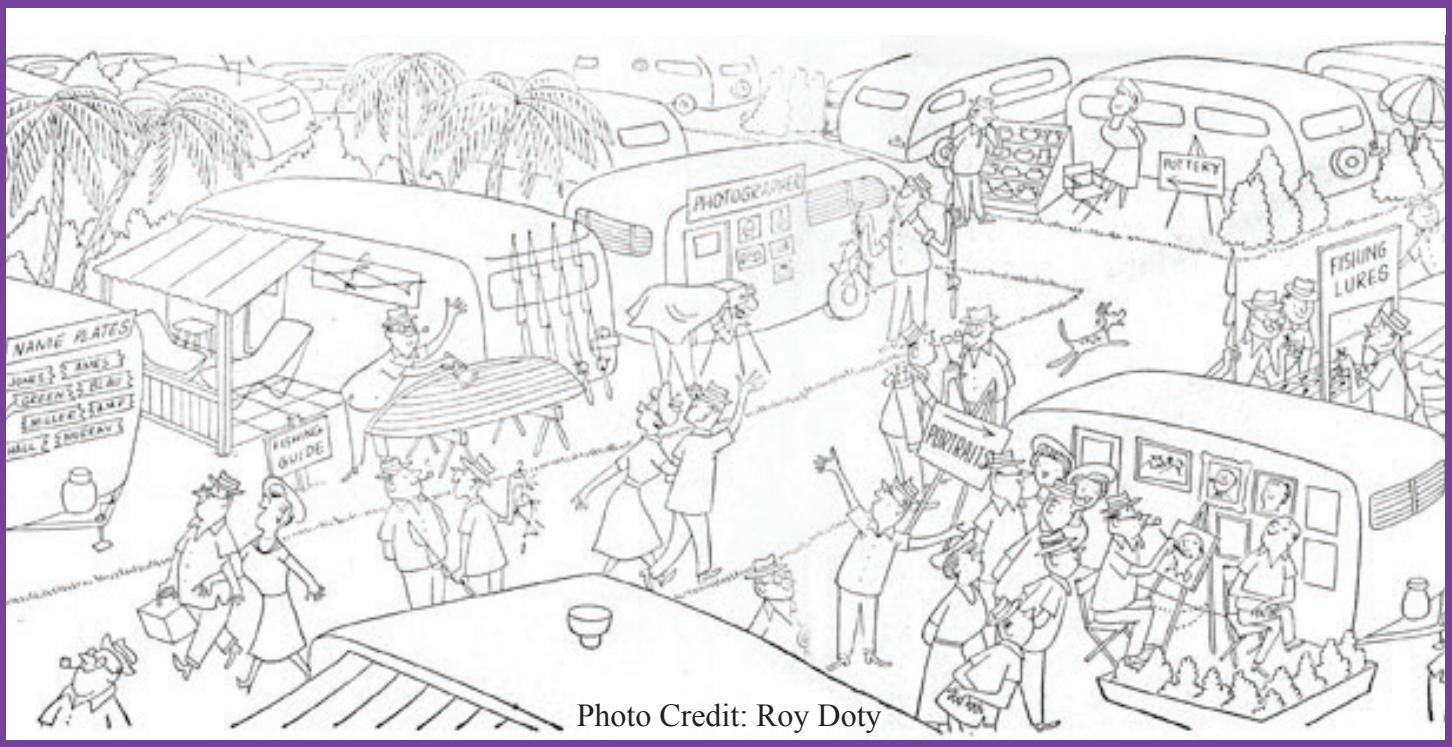


Photo Credit: Roy Doty

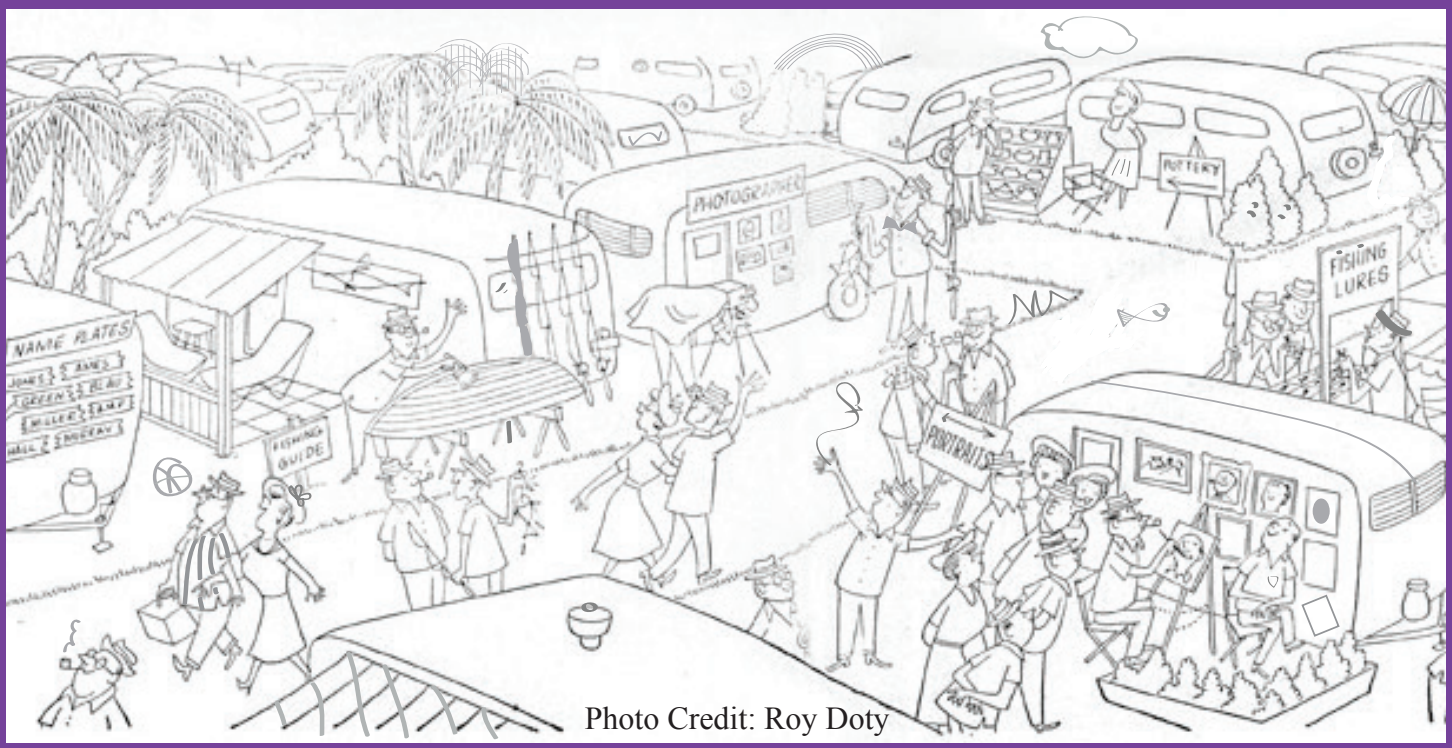


Photo Credit: Roy Doty

It's funny how when I'm loud, people tell me to be quiet; but when I'm quiet, people ask me what's wrong?

DEDUCE THE COMMON PHRASE

The following sentences have been upgraded in their vocabulary. In truth, they represent common phrases. Can you unmask all of them? (Answers on pg. 27)

1. You struck the pointed object upon the brain's abode.
2. Endure it in conjunction with a kernel of sodium chloride.
3. 'Tis an advantage in camouflage.
4. I'm suffering on the underside of atmospheric conditions.
5. Execute a pair of chickens utilizing a solitary pebble.
6. For the purpose of establishing brevity to a protracted tale.
7. The rounded whatchamacallit resides in your enclosure.

JOKE

JUNCTION

After an elderly couple started getting forgetful, they visited their doctor. Their doctor told them that many people find it useful to write themselves little notes.

When they got home, the wife said, "Dear, will you please go to the kitchen and get me a dish of ice cream? And maybe write that down so you won't forget?"

"Nonsense," said the husband. "I can remember a dish of ice cream." "Well, I'd also like some strawberries and whipped cream on it," the wife replied. "I tell you, my memory's not all that bad," said the husband. "No problem - a dish of ice cream with strawberries and whipped cream. I don't need to write it down."

He went into the kitchen, and then his wife heard pots and pans banging. The husband finally emerged from the kitchen and presented his wife with a plate of crackers and eggs.

She looked at the plate and asked, "Excuse me, where's the toast I asked for?"

A blonde walked into a library and asked the librarian, "Can I have a burger and fries?"

She replied, "Sorry, but this is a library."

The blonde then leaned down and whispered, "Oh, sorry. May I have a burger and fries?"

I have six locks on my door all in a row. When I go out, I lock every other one. I figure no matter how long somebody stands there picking the locks, they are always locking three.

JUNCTION

JOKE

JOKE

JUNCTION

My grandmother started walking five miles a day when she was sixty. She's ninety-seven now, and we don't know where on earth she is.

So I was at the park the other day, thinking to myself... "why is the frisbee getting bigger...?"

And then it hit me.

There cannot be a crisis next week. My schedule is already full.

I hate housework. You make the beds, you do the dishes and six months later you have to start all over again!

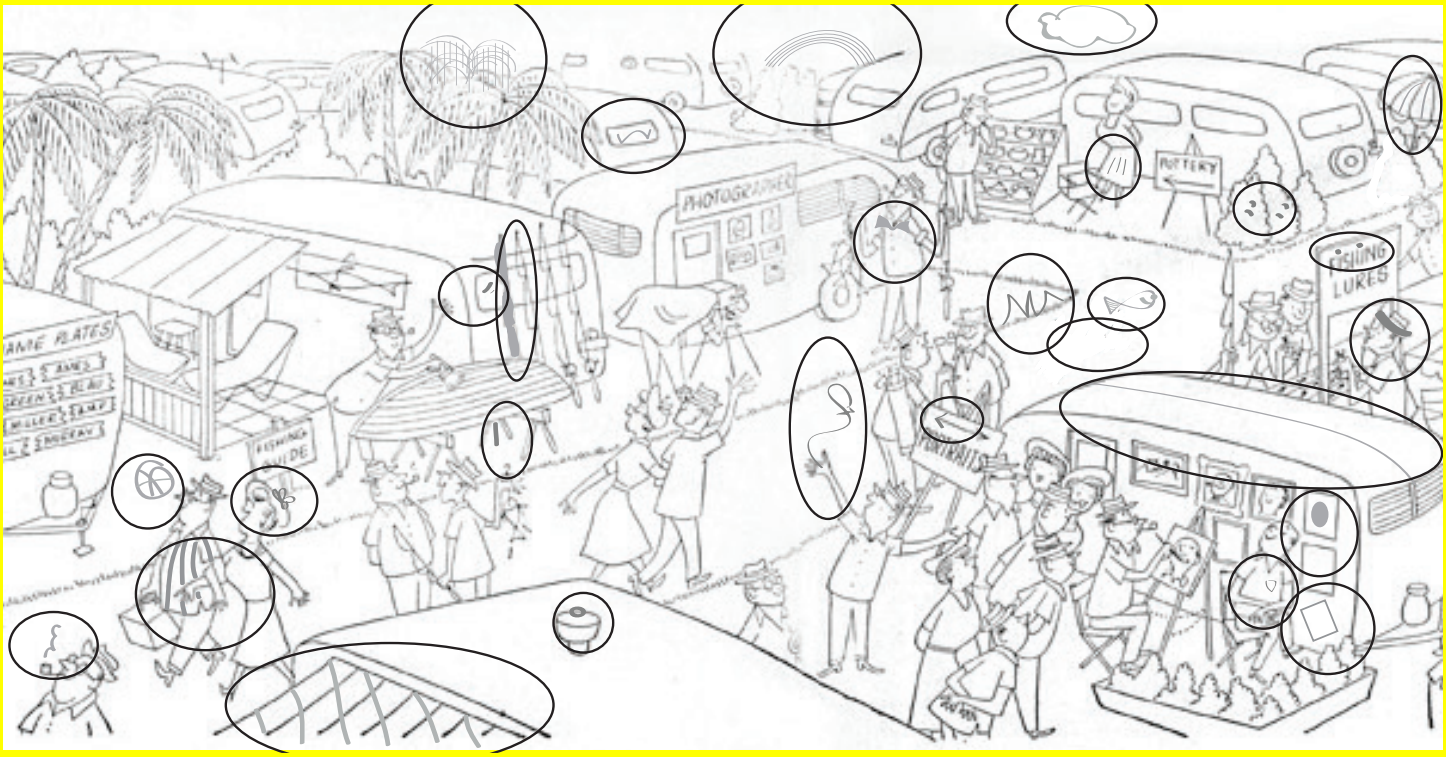
Repeat a lie often enough and it becomes the truth. Repeat a lie often enough and it becomes the truth. Repeat a lie often enough and it becomes...

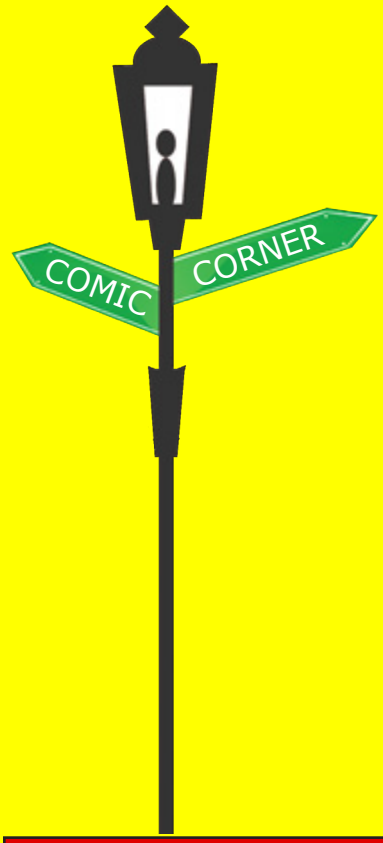
Drinking and driving is extremely dangerous. Today, I stuck my arm out of the window to indicate I'm turning right and someone stole my beer.

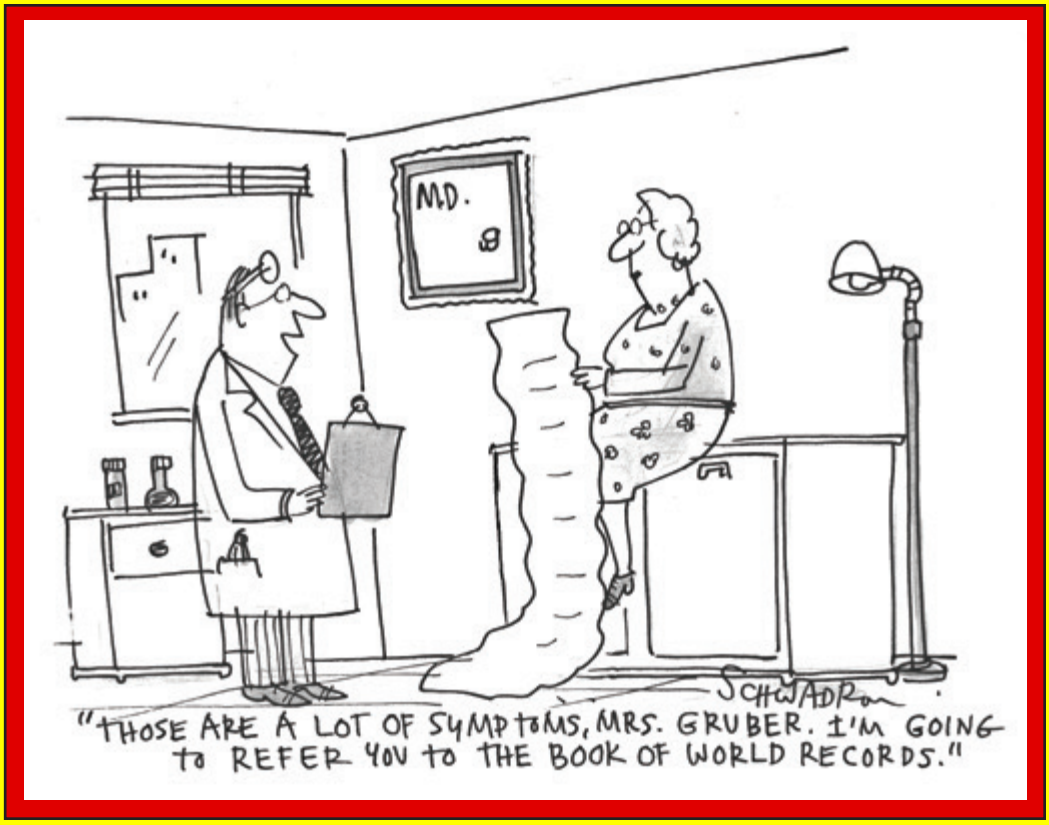
JUNCTION

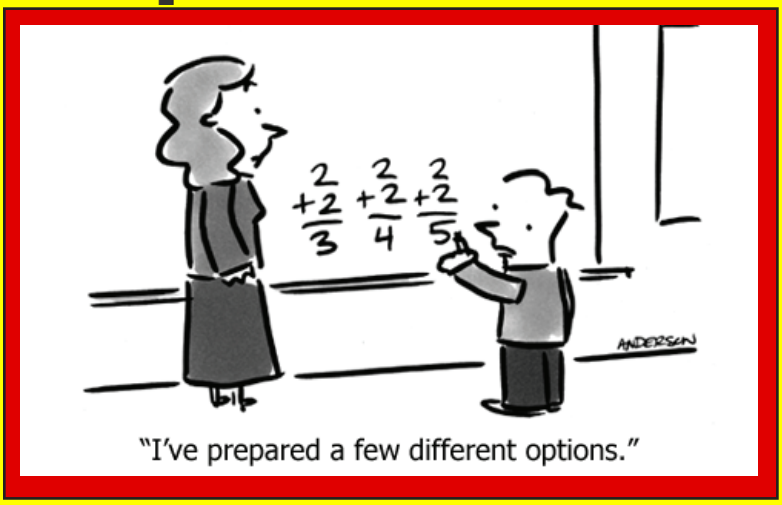
JOKE

Answer to SPOT THE DIFFERENCES:




COMIC
CORNER


M.D.
SCHWADRON
"THOSE ARE A LOT OF SYMPTOMS, MRS. GRUBER. I'M GOING TO REFER YOU TO THE BOOK OF WORLD RECORDS."


2/3 +2/4 +2/5
ANDERSEN
"I've prepared a few different options."


MD
SCHWADRON
"WHY GET A SECOND OPINION, MRS. GRUBER? THIS WEEK WE'RE HAVING A SPECIAL-- TWO OPINIONS FOR THE PRICE OF ONE."


welcome back to school, kids
i know you really don't wanna be here, but always remember...
neither do i!
lefthandedtoons.com

Answer to DEDUCE THE COMMON PHRASE:

Answers: 1. You hit the nail on the head 2. Take it with a grain of salt 3. It's a blessing in disguise 4. I'm feeling under the weather 5. Kill two birds with one stone 6. To make a long story short 7. The ball is in your court