

HEALTH PROMOTION QUARTERLY

A publication from the College of Health, Human Services, and Science



APRIL — JUNE, 2017

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THIS
SPRING!**



Williams Syndrome: How is it similar to and different from Autism?

By Dr. Eszter Barra-Johnson

I recently ran across an interesting article on BBC News about Williams syndrome (WS), named so after a physician in New Zealand who first diagnosed it in 1961. According to the article by Grundy (2017), despite the diagnosis having been around for more than 55 years, healthcare practitioners' overall lack of familiarity with this condition in the U.K., is alarming. While one cannot be sure the same is true for practitioners in the U.S., I have asked around, and most people in my social circles - to which both health care and other professionals belong - have no, or only very superficial knowledge of this condition. Even more confusing are some other articles in the popular media which call it "the opposite of autism" (Hughes, 2009; LaHoud, 2012), because, while both conditions are neurological developmental disorders, they are distinctly different regarding their cause, external and internal symptoms, and the behaviors associated with them. Therefore, I believe it could be interesting and educating to take a glance at this topic.

Most people have heard about autism, a condition that - among other symptoms and to differing extent - exhibits with problems in socializing, speech, and shyness in the company of strangers. But what if a child in your family shows the exact opposite of these symptoms, such as being overly friendly with strangers, boisterous, and easily smiling at everyone? If the child also has learning disabilities and some or all of the physiological health problems mentioned below, could the child have Williams syndrome?

The purpose of this article is to compare these two conditions, and also, to provide the reader with a deeper understanding of the special treatment children with WS need, in order to ensure they get the best possible support. This article also raises the question whether our current ABA education is the right setting to teach and learn about WS, or should there be separate Master's programs and certification options specifically designed for the treatment of WS patients?

Comparison between Autism and Williams Syndrome

| | DSM-V Code | ICD-10-CM Code |
|-------------------|--------------------------------|----------------|
| Autism | 299.0 Autism Spectrum Disorder | F 84.0 |
| Williams Syndrome | None | Q 89.8 |

Diagnoses—Autism is diagnosed within the DSM system as a group of complex neurodevelopmental disorders characterized by repetitive and characteristic patterns of behavior and difficulties with social communication and interaction. The symptoms are present from early childhood and affect daily functioning (NINDS, 2017). Williams Syndrome is diagnosed as a genetic or neurodevelopmental disorder that is due to a chromosomal anomaly, that can be both inherited or a new case (MedicineNet, 2017b). Patients with WS show high prevalence for anxiety disorders, major depressive disorder, and ADHD - but they are not diagnosed within the DSM system (Kennedy, 2006).

Description—The term "Autism spectrum" refers to a wide range of symptoms, skills, and levels of disability in functioning in people with ASD, caused by both genetic and environmental triggers (NINDS, 2017). Researchers have identified regions of chromosomes 2, 7, and 16 as possible risk factors for autism (Hofmann-Reinert, 2001). So-called de novo mutations may explain genetic disorders in which an affected child has mutation in each cell but the parents do not, and there is no family pattern to the disorder. Autism risk also increases in children born to older parents (NINDS, 2017). Williams Syndrome is a neurodevelopmental disorder caused by a genetic problem (no environmental causes are known). It is caused by the deletion of about 26 genes from the long arm of chromosome 7, characterized by a distinctive, "elfin" facial appearance, a low nasal bridge, unusually cheerful demeanor and ease with strangers; developmental delay coupled with unusually good language skills (for someone diagnosed as developmentally delayed); and cardiovascular problems (MedicineNet, 2017b).

Symptoms

Vary, based on severity

Cognitive features—Some children and adults with ASD are fully able to perform all activities of daily living; while others require substantial support to perform basic activities. The DSM-5 (2013) includes high-functioning autism formerly referred to as Asperger syndrome, childhood disintegrative disorder, and pervasive developmental disorders not otherwise specified (PDD-NOS) as part of ASD, rather than as separate disorders. A diagnosis of ASD includes an assessment of intellectual disability and language impairment (NINDS, 2017).

Personality features—having anxiety, being fearful and shy in the presence of strangers is commonly described in connection with autism, to a point of social withdrawal; does not show interest in other people's viewpoints or opinions. According to some sources, Albert Einstein was autistic, at the high end of the spectrum (autism-causes.com, 2008).

Facial and Physical features (external signs of autism) - Researchers have identified distinct facial features that accompany autism. These are according to Aldridge et al. (2011), "(a) children with autism have a broader upper face, including wider eyes; (b) children with autism have a shorter middle region of the face, including the cheeks and nose; and (c) children with autism have a broader or wider mouth and philtrum -- the divot below the nose, above the top lip (Aldridge et al., 2011)." Other visible features of autism, according to Hardy (2017), are:

- Myoclonal jerks, sudden involuntary muscle movements caused by contractions of the muscles
- Poor eye-hand coordination
- Limb apraxia, when it is difficult to make certain movements with an arm or leg
- Problems with intentional movements
- Abnormal gait and posture
- Toe walking
- Clumsiness
- Difficulty with sitting, lying, crawling and/or walking
- Abnormal reaction to sensory stimuli (Hardy, 2017).

Physiological features—Rashes, dermatitis, eczema and/or itching, difficulty chewing and/or swallowing, unusual sweating are among the overt symptoms (easily visible or detectable). Autistic patient may, just like those with Williams syndrome, exhibit heightened sensitivity to sounds (Autism Spectrum Australia, 2017). Beyond the above, there are also so-called covert physiological symptoms, exhibited by autistic patients to differing degrees, or at various stages. These are, according to Hardy (2017) as follows:

- Cerebral Palsy
- Hyper or hypotonia (muscles too tight or too limp)
- Decreased muscle strength, particularly in the upper body
- Incontinence
- Poor circulation
- Elevated heart rate
- Anorexia, feeding problems, vomiting
- Leaky gut syndrome
- Low sulfate levels
- Low levels of edopeptidase enzymes (these are necessary for breaking down casein and gluten)
- Mitochondrial dysfunction (a group of over 40 different disorders that may interfere with the healthy function of mitochondria inside the cells. This area is thought to have led to the controversial cause / effect debate about whether or not there is a link between vaccination and so-called Poling's autism, in 2008, named so after Hannah Poling).
- Increased risk for allergies and asthma
- Low sulfate levels are found in 90% of autistic children, according to ARI. Sulfate aids the GI tract to eliminate toxins and low levels can lead to gastro-intestinal disorders and symptoms (Hardy, 2017).

With Williams syndrome, the symptoms can also be divided up into four areas of functioning.

- Cognitive features: Mental retardation from severe to mild. Hypersensitivity to sound (hyperacusis).
- Personality features: overly friendly, generalized anxiety, and attention deficit disorder.
- Facial features and external signs of the disorder: "elfin" facial appearance, narrow forehead, puffy eyes, short nose, flat midface, full lips, wide mouth, small jaw, and prominent earlobes.
- Physiological features: Supravalvar aortic stenosis (narrowing of the aorta just above the valve; transient hypercalcaemia (higher than usual calcium content in blood and urine) (MedicineNet, 2017b).

Prevalence Rates / Statistics

About 1 in 68 children has been identified with autism spectrum disorder (ASD) according to estimates from CDC's (2016a) Autism and Developmental Disabilities Monitoring (ADDM) Network. ASD is reported to occur in all racial, ethnic, and socioeconomic groups. ASD is about 4.5 times more common among boys (1 in 42) than among girls (1 in 189). Studies in Asia, Europe, and North America have identified individuals with ASD with an average prevalence of between 1% and 2%. About 1 in 6 children in the United States had a developmental disability in 2006-2008, ranging from mild disabilities such as speech and language impairments to serious developmental disabilities, such as intellectual disabilities, cerebral palsy, and autism (CDC, 2016).

Continued on page 8

HPQ Newsletter Experience

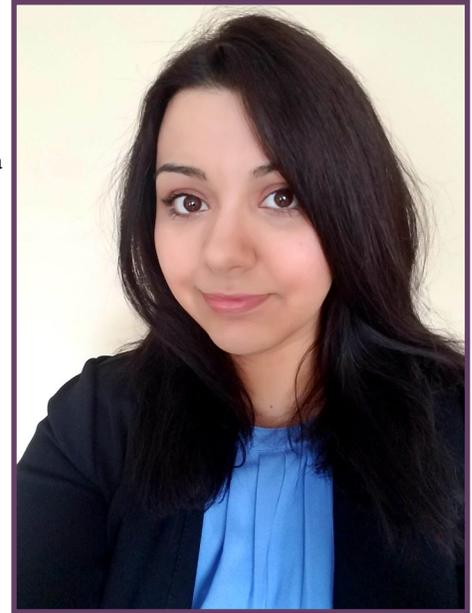
By Olivia Rastello

What I enjoyed about writing for the HPQ Newsletter

I enjoyed several aspects of writing for the HPQ Newsletter. First and foremost, I discovered an unexplored passion of writing for educational and informative purposes. I had never written for such a large audience before, and for the very first time I could take my hobby of writing to a more professional level.

I especially took great pleasure in having the flexibility to write about topics that I felt would aid in empowering individuals. My favorite articles that I contributed were titled Relaxation Techniques for a Busy Life, The Countless Benefits of Volunteer Work, and Laugh Your Way to Better Health. Not only were these topics personally useful, I also felt that they would be helpful to other students. It was incredibly rewarding to know that my ideas could impact other students in a positive way.

Lastly, I enjoyed receiving constructive feedback on my writing as it enabled me to strengthen my writing abilities significantly. I feel that because of this experience I can communicate more effectively in my personal and professional life.



How I think it may have helped me with my academic and career endeavors

I think that writing for the HPQ Newsletter enabled me to become an academically successful student. The mentoring and feedback that I received while writing for the newsletter only strengthened my writing abilities in my academic discussions and assignments. These strengthened writing abilities aided me to submit quality and concise assignments during my undergraduate academic experience.

As for my career endeavors, it has given me an unforeseen vantage point for certain positions. Many jobs to which I applied were looking for individuals who can effectively communicate their message to their targeted audiences. My contributions to the HPQ Newsletter allowed me to provide concrete writing samples to potential employers. This was especially helpful during the interview process.

How I think it may benefit other students to participate

I think that participating in the HPQ Newsletter would benefit students in a multitude of ways. I think that writing for the HPQ Newsletter would flex and enhance students creative writing skills.

I believe that participating would allow them a platform to express their thoughts and viewpoints to a large audience. While having this large platform to communicate, the students would have the comfort and resources of receiving constructive feedback from the Mentors and Editors of the HPQ Newsletter.

Additionally, I feel that writing about alternative topics that differ from their coursework can allow the students to expand their knowledge on topics that interest them, but that their courses may not touch upon. This would enhance their knowledge even further outside of the classroom.

I feel that participating in the HPQ Newsletter can help students gain some professional writing experience while completing their degree in a welcoming atmosphere. I personally felt extremely motivated to improve my writing when I saw my articles published. It was a very encouraging and rewarding experience.

I feel that the HPQ Newsletter is a beautifully orchestrated balance of gaining professional writing experience while also receiving valuable support and guidance on the content of your writing.

Read Olivia's Success Story [here!](#) ♦

Fake News and Your Health

By Dr. Dan Tinianow

It seems that we have been hearing and reading the term “fake news” with increasing frequency in recent weeks and months. To some, this term means untrue information being represented as true news. To others, the term is applied to any news that they do not agree with, true or not. By and large, “fake news” stays in the political arena, at least in terms of the recent upswing in usage of the term. However, “fake news” has always been a factor within the realm of health news and health information, as well as other fields. In other words, some (and possibly much) of health news reported in the popular media includes misrepresentations, exaggerations, and outright falsehoods.

The starting point for assessing health news is very similar to how one would assess any news story. Begin by considering the source. If you find a story on beet juice curing cancer, click through to the homepage of the website where it is posted. Usually, clicking on the website logo in the header will get you there. If you find nothing on the homepage but obviously wild claims, like “Trump is a robot,” or “New Star Wars film to highlight return of Jar Jar Binks,” you may be on a parody news site like The Onion.



A more troubling possibility is that you may be on an actual fake news website with an agenda to deceive. Websites like this will try as much as possible to resemble genuine news websites. In fact, it is not difficult to “spoof” a genuine news source. For example, one could buy the domain name “cnn.com,” create a lookalike logo and website design and start spreading fake news through it. Anyone with decent web design skills, or the money to pay a designer, can convincingly produce a fake news site, and beyond this, there are apps and websites that make it easy to create fake news. To reduce the likelihood of being taken in by such a website, one should look for the same story from other sources and be extremely skeptical of a story being reported only by a single source. A story being reported by several sources, but none of the major news outlets, should also be viewed with skepticism. It is necessary to play detective to sniff out signs of fake news.

Even if there is no sign of parody or intent to deceive, there is an additional factor to consider for health, science, and technology news. One must have some insight into the expertise of the source of the story. “Source” in this case refers to the credited author of the story. Some reporters will be more scientifically literate, and others less so. Review other articles written by that reporter to get an overall sense of expertise and accuracy. It may even be possible to find third party evaluations of this reporter’s expertise.

It is quite possible that a reporter intends to be factually accurate when reporting a story, but does not fully understand the source material (for example a journal article or a presentation) and ends up misrepresenting the information unintentionally. In any case where the story provides a link or other access to the original source material, it is worth accessing and reviewing that material.

The fact is that even in the world of refereed academic publications, mistakes can occur, resulting in the publication of inaccurate or false information. Beyond this, as more research is conducted, understanding evolves over time. After all, at one time, it was scientifically accepted that the earth was at the center of the universe, and we make new discoveries all the time that revise or overrule current scientific “fact.” The best tools in maintaining objectivity when reading health news, including academic publications, is to apply critical thinking and historical perspective and to keep in mind that our understanding of the scientific world is constantly evolving. ◆

Having A Pet Can Make Your Life Healthier

By Dr. Maureen Lienau



Which three states rank in the top of the nation for healthiest pets? (Answers can be found at the end of the article). But more importantly, why is this an important connection to human health? The social benefits of owning a companion pet are generally quite positive. While family and friends can provide social support, they may also cause stress; whereas, pets have been shown to consistently reduce stress. Simply stroking a pet has been found to lower blood pressure, lower the breathing rate, and boost oxytocin (the love or cuddle hormone) according to the Harvard Medical School (Harvard Health Letter, *The health benefits and risks of pet ownership*, February 2016).

In a study completed by Miami University and St. Louis University, lead researcher Dr. Allen McConnell stated “pet owners had greater self-esteem, were more physically fit, tended to be less lonely, were ore

conscientious, were more extroverted, tended to be less fearful and tended to be less preoccupied than non-owners” (APA, *The truth about cats and dogs: Pets are good for mental health of ‘everyday people’*, July 11, 2011). These findings demonstrate the tremendous emotional and physical health benefits of having companion pets in a household. Pets can provide positive health factors because they reduce loneliness and isolation.

Pet ownership also has been shown to increase life expectancy. In the *American Journal of Cardiology*, researchers followed 400 heart attack patients for one year after release from the hospital. “One year later the pet owners had a significantly higher survival rate than non-pet owners” (Cohen, S. *Health and psychological benefits of bonding with a pet dog: A pet dog can improve your mental and physical health*. *Psychology Today*, June 7, 2009). The supposition is that pet owners had a supportive, loving bond with their pets and were responsible to care for them, which lowered their stress - a significant factor for heart disease, and in turn, increased longevity. Research studies from around the world have demonstrated a significant bond between humans and their companion pets, although most studies have focused on the emotional and physical link between dogs and humans. When we arrive home each day, who greets us at the door with their tails wagging, jumping up, and excited to see us? This source of unconditional love has tremendous health benefits, although the same may not be true for people who use dogs as security guards.

Relating this specifically to dogs, one of the famous sayings about dog ownership is, “If your dog is fat, you aren't getting enough exercise” (anonymous). This correlation between an animal's weight and yours is pretty obvious – with pet ownership comes the responsibility to care for them by walking, playing catch, and getting outdoors. Pet owners have the additional benefit of socializing while routinely talking with pet owners and others while walking their dogs. The Human Animal Bond Research Institute (HABRI) found that the estimated human health care cost benefit savings of having a pet is \$11.7 billion (*Furry friends can cut our health costs: We save billions because of Fido and Fluffy*, January 18, 2016. Retrieved from <http://www.lifezette.com/healthzette/furry-friends-can-cut-our-health-costs>). Thinking about this statistic in your own career, could companion pets be recommended for patients/clients as a health care benefit? How might a companion pet fit into your own lifestyle?

For those in the health industry, working with patients or clients who are depressed with limited social contact, there may be a benefit from pet ownership. Companion pets can help to engage emotional bonds by accepting responsibility for caring for another and thinking about something other than themselves. Dog walking is a necessary component of pet ownership which helps with socialization (another way to lose focus on oneself), and increased physical fitness. Pet owners are often stopped along their route as most people will engage people with pets more readily than someone walking alone. However, companion pets may not be for everyone and not all pets fit into a human's lifestyle. Frequent travelers, those unsettled by loud barking and noises, or pets with behavioral issues may have a negative effect on the health of their owners. Referring back to the beginning of the article, you were asked, “What is the human benefit in keeping a pet healthy?” In reading this article, my hope is that you have realized that keeping our pet companions healthy is important in realizing categorical health benefits in our lives, too. Finally, the answer to which states have the healthiest pets are: 1) Montana 2) Nebraska 3) Colorado (Wenzel, J. *Colorado ranks No. 3 in the nation for healthiest pets*, *The Denver Post*, March 4, 2017). This Denver Post article also lists the top ten states for pet health – see if yours is one of them. ♦

What Health Means to Me...

Dr. Kathy Wood
Educator and Health
Professional

[Play video](#)



Dr. Danny Villa-Giroux
Lead Faculty/Assistant Pro-
fessor—College of Health,
Human Services, and Science

[Play video](#)

Talking Health

Continued from page 3 — Williams Syndrome: How is it similar to and different from Autism?

Only about 1 in every 10,000 children are born with Williams Syndrome, worldwide (Williams Syndrome Association, 2016). However, MedicineNet (2017) puts the number at ca. 1 in every 7,500 new births, which may show increasing tendency or past under-diagnosis of the condition, due to the fact that some patients lack the external indicators or may not have high levels in Calcium (Lowery et al., 1995). This prevalence rate includes data from research in the U.S. and Norway. Gender-differences in prevalence data are not currently available; although Swedish research is pointing to no difference when it comes to gender (The Swedish Information Centre for Rare Diseases, 2017).



Age / Method of Diagnosis

Autism is usually diagnosed at around age 3-5. However, recent research indicates that a brain trace EEG may point to the presence of autism in children as young as 2 years old (Roberts, 2012). Additionally, there could be some behavioral indicators that may raise concerns for autism being present, as follows:

- no babbling or pointing by age 1
- no single words by age 16 months or two-word phrases by age 2
- no response to name
- loss of language or social skills previously acquired
- poor eye contact
- excessive lining up of toys or objects
- no smiling or social responsiveness (NINDS, 2017).

Williams Syndrome can be diagnosed around age 1 and up, based on the presence of the odd external features, a lab test known as **fluorescent in situ hybridization** (FISH), or a recently introduced new diagnostic test known as **micro-array analysis**, which does not only find evidence for elastin deletion, but also shows the exact size of the deletion on chromosome #7 (Williams Syndrome Association. (2016).

Treatment Options / Support

There is no cure for ASD. The ideal treatment plan combines **educational/behavioral interventions** with **medications** for anxiety, depression, and obsessive-compulsive disorder. Antipsychotic medications are used to treat severe behavioral problems. Seizures can be treated with one or more anticonvulsant drugs. Medication used to treat people with attention deficit disorder can be used effectively to help decrease impulsivity and hyperactivity in people with ASD (NINDS, 2017). Autism support groups and information forums are easily available via the Internet, for example, via <http://www.autism-society.org/>.

Like Autism, WS is also incurable. Treatment will consist of both medical and therapeutic options, depending on the individual needs of each person. Despite problems in almost every other area, children with WS show deep interest and talent in music of every type, and music therapists – especially those offering brief, 15-20 minutes sessions – could help by exposure to music, as well as selecting the most adequate type of musical instrument for each child (Williams Syndrome Association, 2016). Besides locally available support groups, the Williams Syndrome Association (WSA) at <https://williams-syndrome.org/is> dedicated to improving the lives of individuals diagnosed with the condition.

Based on the above information, I believe it is easy to see why the two conditions, while sharing some common features such as both being developmental disorders and genetically based, are very different. It was interesting to read the pre-DSM-V contemplations by various mental health professionals regarding whether Williams Syndrome should or should not be included in the DSM-V. Opinions vary on the topic. It looks like some psychiatrists believe that, because the DSM authors have historically excluded medical disorders in their coding system, some believe that logically, not only should Williams Syndrome be left out, but autism then also should not be diagnosed within DSM (Block, 2012). Others, like Kennedy (2006) point to the presence of psychiatric problems (anxiety disorders, especially, phobias, ADHD, etc.) in Williams Syndrome which make it somewhat unusual for DSM-V not mentioning this group of patients at all, although it does offer coding for Intellectual Disabilities. Using DSM-IV criteria at the time this article was written, it was found that 39% of a cohort of mentally retarded children showed a diagnosable mental disorder (Kennedy, 2006).

Beyond all this wrangling over where and how to diagnose developmental disorders with clear genetic causes but resulting psychological disorders, we are left with the touching stories of boys like little Angharad Rowlands from Wales / UK, whose physical and mental challenges are heart-breaking. Most mothers, when asked whether they want a boy or a girl, respond that what counts is, the child has to be healthy; the gender is of secondary importance. To think about what the parents must have been put through not only because of realizing their child is not in perfect health, but the subsequent misdiagnoses and lack of sufficient support from the otherwise generous government programs in their country for parents of autistic children, is hard. In addition, due to their extremely trusting nature, children with Williams Syndrome must be closely watched 24/7, as they are eager to please thus be prone to dangers like abuse, abduction or bullying. Clearly, treatment options are still somewhat blurry in both the U.K. and in the U.S., but the good thing is that the more openly and frequently these stories are published, the more likely practitioners will contribute to more comprehensive policies with the goal to assist the segment of the general public affected by Williams Syndrome, either directly, or as a caregiver. In Wales, the government just announced additional funding for Williams Syndrome patients, in the amount of £20 million (Grundy, 2017), and enhancing awareness of the condition among its healthcare provider and education providers.

In summary, financial assistance is one thing, social support is another; and it should involve raising awareness of the challenges parents of kids diagnosed with WS face, as well as opening more respite care and other facilities so the parents and guardians of these little angels can also find relief from their day-to-day stress. Thankfully, more and more fundraising and special education materials are developed here in the U.S.A., as I am typing this article. One other question that needs to be explored is, with many universities turning out Master's level BCBA-eligible students in the framework of ABA programs, should the education of ABA students include more information about Williams Syndrome, or, should there be a separate program preparing students for certification, similar to how ABA is set up, but entirely focusing on assisting patients with Williams Syndrome? If the answer is the latter, and knowing that the occurrence of WS is on the rise, then at what prevalence rate would it make sense to prepare curriculum specifically designed to address the care and treatment of Williams Syndrome patients? It would possibly take collaboration among state licensing boards, legislative bodies and educational institutions to find the best possible solution. The Williams Syndrome Association appears to be very engaged in this heroic and pioneer work; and this is a good step in the right direction. ♦

Rhubarb: vegetable or fruit?

By Dr. Roxanne Beharie

While most people use rhubarb as if it were a fruit, it is actually a vegetable. This is despite a New York court declaring it a fruit in 1947 to save businesses who imported it from additional taxes. So, rhubarb is technically a vegetable, but it is legally classified as a fruit. Oh, New York. :) You can usually find rhubarb at farmers markets and grocery stores where it is sold in stalks, similar to celery. The stalks range in color from light pink, to bright pink (most recognizable), to even pale green. It is important to note that the color of the stalk has no bearing on the ripeness or sweetness of the stalk. More importantly, the leaves of the rhubarb plant are poisonous, therefore, only the stalk and flowers should be consumed.

So, what is so great about this vegetable/fruit? One cup of raw rhubarb contains about 45% of the required daily value of Vitamin K. Vitamin K plays a big role in bone metabolism and potentially protects against osteoporosis and provides overall protection for bones. Research has also shown that rhubarb protects the brain from neurological damage, which in turn prevents certain disorders such as Alzheimer's, ALS, stroke, etc. Rhubarb is also a high-fiber food which can help to ease digestion, as well as relieve constipation and diarrhea. If that was not enough, another benefit to consuming rhubarb is its antiviral effect which helps to reduce inflammation.

Now that you are ready to run to the store to grab some, keep in mind that rhubarb in its raw state is very, very, very (feel free to add some more if you agree) tart. As such, it is almost always heavily sugared when baked or cooked. Rhubarb is mostly paired with strawberries in pies, but can also be used in donuts, cakes, and beverages.

Try the below recipe for Rhubarb Toaster Strudel from A Beautiful Mess (www.abeautifulmess.com) as well as these other rhubarb recipes from The Huffington Post (http://www.huffingtonpost.com/2015/03/23/rhubarb-recipes_n_1380075.html) and let me know which is your favorite. :)

Rhubarb Toaster Strudel

INGREDIENTS

2 cups finely diced rhubarb
 1/3 cup sugar
 1/4 teaspoon ginger
 1 sheet of puff pastry
 1/2 cup butter
 1 to 1 1/3 cup powdered sugar

DIRECTIONS

Dice up the rhubarb and combine with the sugar and ginger in a bowl, set aside. Cut your puff pastry dough into 8 to 10 squares. On a baking sheet lined with parchment paper lay out a square of dough, fill with a spoonful of rhubarb and fold over into a triangle. Use a fork to press the edges together. Continue until you have filled all the pastry squares. Bake at 375 F for 20-22 minutes.

During the last 3-4 minutes of baking prepare your glaze. In a small pot melt the butter over low heat. Begin adding powdered sugar, 1/3 cup at a time and whisking to combine. Continue until you have the consistency you like. Remove toaster strudels from the oven and immediately drizzle glaze over them. The glaze will harden as it cools so be sure to get your drizzling done before it has time to harden.

Enjoy! :) ◆



April

- Alcohol Awareness Month
- National Child Abuse Prevention Month
- National Minority Health Month
- Oral Cancer Awareness Month
- 23 - 29 World Immunization Week
- 24 - 28 Every Kid Healthy™ Week
- 24 World Meningitis Day

May

- Healthy Vision Month
- Mental Health Month
- National Physical Fitness and Sports Month
- National Stroke Awareness Month
- 14 - 20 National Women's Health Week
- 15 - 21 National Hurricane Preparedness Week
- 18 HIV Vaccine Awareness Day

June

- Men's Health Month
- National Safety Month
- Alzheimer's & Brain Awareness Month
- 4 National Cancer Survivors Day ®
- 12 - 18 Men's Health Week
- 19 World Sickle Cell Day

Next Quarter Conferences

2017 National Sexual Health Conference
July 6 - 8, 2017 | Denver, CO

2017 Annual National Association of Local
Boards of Health (NALBOH) Conference
August 2 - 4, 2017 | Cleveland, OH

2017 CityMatCH MCH Leadership Conference
& Healthy Start Convention
September 18 - 20, 2017 | Nashville, TN

Contributors



Dr. Eszter Barra-Johnson has lived and studied in the U.S. since 1996. She subsequently received three graduate degrees, MS in Clinical Psychology, PhD in Health Psychology and more recently, MA in Diplomacy with Emphasis on International Conflict Resolution. She has been teaching at Ashford University since 2007.



Olivia Rastello is currently pursuing a Bachelor of Arts in Health and Wellness. She has a long term goal of becoming a health and wellness professor and/or an employee at a health promoting non-profit organization. She is an advocate of volunteer work and is currently volunteering for the Crohn's and Colitis foundation.



Dr. Dan Tinianow is Program Chair of Communication Studies at Ashford University. He holds a Master of Science in Television/Radio/Film and a Doctor of Philosophy in Mass Communication from the S. I. Newhouse School of Public Communication at Syracuse University. He is the author of two recent textbooks in the Communication field.



Dr Maureen K Lienau is the Chair of Cognitive Studies in the College of Education at Ashford University, where she has worked for ten years. She is a lifelong animal lover and four-legged family owner.



Dr. Kathy Wood is a health professional with over twenty years of experience in higher education. She has a family of four children, and enjoys participating in activities with them. She resides in Hickory, NC.



Dr. Danny Villa-Giroux is an Assistant Professor in the College of Health, Human Services, & Science and teaches courses in Health and Human Services as well as Gerontology. He's been with Ashford for 4.5 years and is a past contributor of the Health Promotion Quarterly. A native of Southern California, Dr. Villa-Giroux works remotely from Corona, California.



Dr. Roxanne Beharie is an Assistant Professor with Ashford University. Dr. Beharie earned her doctorate in Public Health from Morgan State University in Baltimore, Maryland. Dr. Beharie also earned a BS in Exercise Science from the University of Pittsburgh and an MPA in Health Services Management from Mercy College.

Williams Syndrome: How is it similar to / different from Autism?

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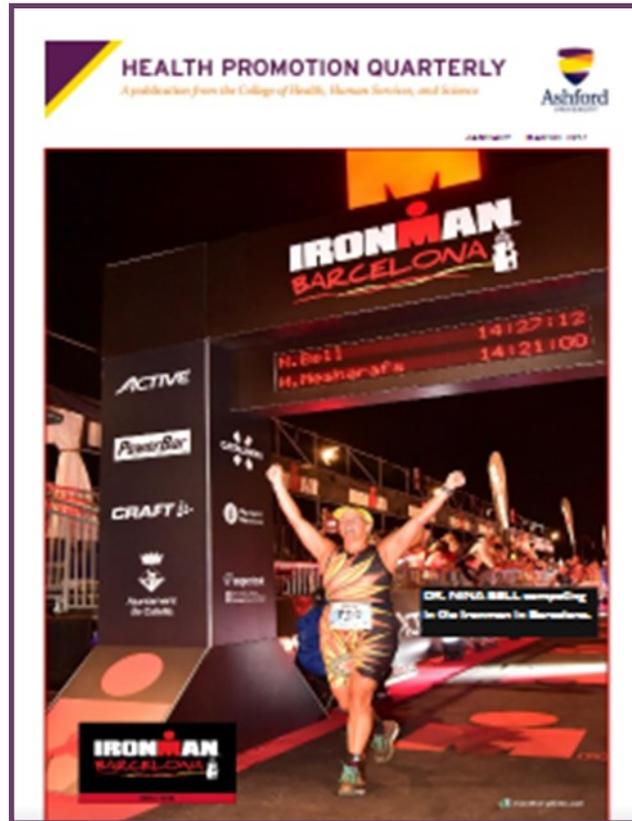
Special Thanks

A very special thank you goes out to our copy editor for this edition, Heather Auger, Instructor of English, Division of General Education.

Thanks!!

“Calm mind brings inner strength and self-confidence, so that’s very important for good health.”
- Dalai Lama

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