CENTRIC HEALTH
Research & Education Foundation

NEWSLETTER

IN THIS ISSUE

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HOLIDAY BLUES OR SAD?

- William Baker, MD

This time of the year can be busy, demanding and stressful. The winter holidays can also be a painful period of reflection, anxiety and depression. The accompanying pervasive sadness is often characterized as "Holiday Blues", also known as Holiday Depression. Regardless of how much we love the season, the demands of gatherings, decoration, preparations and the reality of too much to do and so little time can make anyone feel stressed and exhausted. Add the emotional aspect of the holidays and it's a recipe for the doldrums. The presence of an underlying mental health condition further predisposes one to holiday depression. According to the National Alliance on Mental Illness, 64% of people with an existing mental illness report that the holidays make the symptoms of their condition worse.

CAUSES OF HOLIDAY DEPRESSION:

Isolation and loneliness – Especially occur when unable to spend the holidays with family and friends.

Unrealistic expectations – The commercialization of the holidays create the expectation of non-stop joy and cheer. As this is unrealized holiday stress and sadness result.

Reflection on the past year – Approaching the impending New Year often causes people to feel regret, failure or other negative emotions.

SYMPTOMS OF HOLIDAY DEPRESSION:

- Depressed or irritable mood
- Difficulty concentrating
- Feelings of worthless or guilt
- Feeling more tired than usual
- Feeling tense, worried or anxious
- Loss of pleasure in doing things you usually enjoy

In addition to "Holiday Blues" the same symptoms occurring during the fall and winter months can also be an indication of an underlying major depressive disorder known as Seasonal Affective Disorder (SAD). Distinguishing between the two can be difficult but is essential to receiving appropriate treatment.

HOLIDAY DEPRESSION

Starts around November or December and lifts shortly after the New Year. Symptoms are fairly mild.

SAD

Typically lasts about 40% of the year, starting in the late fall and early winter.

TREATMENT OF HOLIDAY DEPRESSION

Talk to your healthcare provider or consult with a mental health professional.

Drink alcohol only in moderation – alcohol is a central nervous depressant and too much can aggravate negative feelings. Set a limit of 1-2 ounces at holiday gatherings.

Avoid isolation as social isolation is a major risk factor for depression. In a vicious cycle, depression makes social interaction more difficult and perpetuates the problem. Even if you cannot be home for the holidays, ask a friend to visit, join a local club, volunteer for something you believe in or find a way to serve those less fortunate.

Exercise regularly as this has been found to quite powerful at reducing symptoms of depression and stress. At a minimum walk for 30 minutes 5 days per week.

Learn to say no! Limit the demands on your time in order to reduce stress and the challenge of meeting the expectations of others.

Make your plans and expectations realistic. Remember that holidays change as people change. Kids grow older, family and friends move and life changes. Focus on the new connections in life, create new traditions. Fondness for the memories of past holidays does not mean that we cannot enjoy the holiday of the moment. Enjoy those you are with and avoid expecting an always and forever "picture-perfect" ending.

Holiday depression can turn November and December into a time of dread and despair. Pay attention to the causes of stress and anxiety and focus on changing those things. **Don't let "Holiday Blues" hijack your "Happy Holidays".**

SAD (SEASONAL AFFECTIVE DISORDER)

Seasonal affective disorder (SAD) is a type of depression. It is a diagnosed mental health disorder and not the result of a stressful environment as discussed with holiday blues (holiday depression). SAD occurs during certain seasons of the year and is thought to be the result of chemical changes in the brain resulting from shorter days and less daylight. Melatonin is a sleep-related hormone, also linked to SAD. More melatonin is produced when it's dark, thus more is produced when the days are shorter and darker. SAD is treated with light therapy and antidepressants rather than behavioral change, as is the case with holiday depression.

SAD is a form of depression which can last weeks, months or years. For unknown reasons, women are more affected than men. SAD is rare in people younger than age 20. Two types are identified as Fall-onset and Spring-onset. Fall-onset is also known as winter depression with symptom onset in the late fall to early winter. Symptoms ease in the early summer. Spring-onset is much less common and occurs in the late spring to early summer and is often called summer depression.

SYMPTOMS OF SAD

- Increased sleep and daytime drowsiness
- Loss of interest and pleasure in activities formerly enjoyed
- Social withdrawal and increased sensitivity to rejection
- Grouchiness and anxiety
- Feeling of guilt and hopelessness
- Excessive tiredness (fatigue)
- Decreased sex drive
- Decreased ability to focus
- Trouble thinking clearly
- Increased appetite, especially for sweets and carbohydrates
- Weight gain
- Physical problems such as headaches
- Symptoms reoccur and resolve at about the same time every year
- Symptoms of SAD may mimic other mental health disorders and a diagnosis can only be made by a healthcare provider

SAD DIAGNOSIS

Some of the symptoms of depression can also occur as the result other medical conditions including heart disease and cancer as well as mood disorders or substance abuse. A thorough medical evaluation and accurate medical and psychiatric diagnosis are essential before treatment.

SAD TREATMENT

Exposure to sunlight – spend time outdoors or near a sunlit window. Light therapy – if exposure to natural sunlight is not possible, use of a special light (SAD lamps) for a certain number of hours per day can be effective at reducing symptoms. About 60% of SAD patient respond favorably to light therapy.

Psychotherapy – cognitive behavioral therapy and interpersonal therapy can help improve a distorted viewpoint of oneself and the personal environment.

Antidepressant medications – medications are highly effective in correcting the chemical imbalance responsible for depression symptoms. Selective serotonin reuptake inhibitors (SSRI) are the most commonly used. These include Fluoxetine (Prozac), Citalopram (Celexa), Escitalopram (Lexapro), Sertraline (Zoloft), Paroxetine (Paxil). Bupropion (Wellbutrin XL) or Aplenzin (long-acting bupropion) is a combination of norepinephrine and dopamine reuptake inhibitor (NDRI) and is specifically approved for treating SAD.

MODIFY BEHAVIOR

Get professional help.

Set realistic goals.

Be with other people and avoid being alone.

Do things which help you feel better such as going to a movie, gardening, taking part in religious, social or other activities. Do something nice for someone else.

Get regular exercise.

Expect your mood to improve gradually, not immediately.

Eat healthy, well-balanced meals.

Avoid alcohol and illegal drugs as these can make depression worse.

Delay big decisions such as getting a new job, getting married or divorced or selling your home until the depression has lifted. You will then have a much more objective viewpoint and make a decision which is the best for you.

Whether "Holiday Blues" or SAD, treatment takes time, appropriate self-care and the assistance of skilled medical professionals. Enjoy "Happy Holidays" and a wonderful winter season unfettered by painful depression.

Healthy holiday sugar cookies made with whole wheat flour and sweetened with just a little sugar and applesauce.

Prep Time

- 20 minutes
- Cook Time
- 12 minutes
- Additional Time
- 1 hour
- Total Time: 1 hour 32 minutes

Ingredients

- ½ cup coconut sugar or cane sugar
- ½ cup unsweetened apple sauce
- 1 egg
- 1 teaspoon vanilla
- 1 ½ cups whole wheat flour
- ½ teaspoon baking powder
- ¼ teaspoon kosher salt

Instructions

- Combine the coconut sugar and apple sauce in a large mixing bowl. Stir till thoroughly combined.

- Add the egg and vanilla to the bowl and stir till combined.

- Mix the flour, baking powder, and salt in a small bowl until combined.

- Pour the flour mixture into the wet mixture and stir till fully combined.

- Chill the dough in the refrigerator for 1 hour.

- Preheat oven to 350 degrees F. Dust a clean surface with flour and roll the dough to ½-inch thickness. Cut into shapes as desired.

- Place cookies on a parchment-lined baking sheet and bake for 10 to 12 minutes until they are golden brown.

- Allow cookies to cool on the baking sheet for 2 to 3 minutes before removing them to fully cool on a wire rack.

- Decorate as desired with icing or sprinkles.

Nutrition Information:

- Yield: 24 Serving Size: 1
- Amount Per Serving:
- Calories: 47Total
- Fat: 0g Saturated
- Fat: 0g Trans
- Fat: 0g Unsaturated
- Fat: 0g
- Cholesterol: 8mg
- Sodium: 27mg
- Carbohydrates: 10g
- Fiber: 1g
- Sugar: 5g
- Protein: 1g

CAN'T SEE? Is it FOG, HAZE or SMOG?

- William Baker, MD

This time of year, we can easily forget that Earth's atmosphere is naturally clear. Clear skies allow the sun's rays to warm us and all living things. Clear skies also allow us to see from the Sierras to the Coastal Range, and the vivid colors of our beautiful green valley. Certain atmospheric conditions can reduce air transparency, decrease the amount of sun reaching the surface and shorten our range of visibility.

Unfortunately, many mornings this time of year, we must turn on fog lights and slow down as we navigate through the foggy morning commute. During the summers, we cannot see mountains for the dense haze/smog. Not only are the causes of reduced visibility different but also are the health consequences.

Three common atmospheric phenomena are responsible for our days reduced visibility. All of these have in common the presence of minute particles in the air which block the passage of light waves by absorbing or scattering them.

FOG

Fog is much like clouds, as air is saturated with water vapor. Excess moisture coalesces into miniscule, densely packed water droplets. The air's saturation point for water is known as the dew point. This depends on the concentration of water in the air as well as the temperature. Colder air can accommodate less water vapor, reaching its dew point at a lower relative humidity. This is one reason fog forms early in the morning. At temperatures below 32 degrees Fahrenheit, water droplets freeze. As the day breaks and the air temperature increases, the water vapor gradually evaporates and visibility improves. When we exhale in chilly weather, the heated air from our respiratory tract is laden with water. When our breath enters the cold air, the dew point drops rapidly and some of the water vapor forms droplets, creating a puff of "fog". In the San Joaquin Valley it is known as "tule fog".

Tule fog is a thick ground fog that settles in the San Joaquin Valley and Sacramento Valley areas of California's Central Valley. Tule fog forms from late fall through early spring beginning after the first significant rainfall. The official time frame for tule fog to form is from November 1 to March 31. This phenomenon is named after the tule grass wetlands (tulares) of the Central Valley. As of 2005, tule fog was the leading cause of weather-related accidents in California.

Tule fog is a radiation fog, which condenses when there is a high relative humidity (typically after a heavy rain), calm winds, and rapid cooling during the night. The nights are longer in the winter months, which allows an extended period of ground cooling, and thereby a pronounced temperature inversion at a low altitude.

In California, tule fog can extend from Bakersfield to Red Bluff, covering a distance of over 400 miles. Tule fog occasionally drifts as far west as the San Francisco Bay Area via the Carquinez Strait, and can even drift westward out through the Golden Gate, opposite to the usual course of the coastal fog.

Tule fog is characteristically confined mainly to the Central Valley due to the mountain ranges surrounding it. Because of the density of the cold air in the winter, winds are not able to dislodge the fog and the high pressure of the warmer air above the mountaintops presses down on the cold air trapped in the valley, resulting in a dense, immobile fog that can last for days or at times for weeks undisturbed. Tule fog often contains light drizzle or freezing drizzle where temperatures are sufficiently cold.

Tule fog is a low cloud, usually below 2,000 feet in altitude and can be seen from above by driving up into the foothills of the Sierra

Nevada to the east or the Coast Ranges to the west. Above the cold, foggy layer, the air is typically mild, dry and clear. Once tule fog has formed, turbulent air is necessary to break through the temperature inversion layer. Daytime heating (cloud-penetrating visible light wavelengths transformed to infrared by the ground) sometimes evaporates the fog in patches, although the air remains chilly and hazy below the inversion and fog reforms soon after sunset. Tule fog usually remains longer in the southern and eastern parts of the Central Valley, because winter storms with strong winds and turbulent air affect the northern Central Valley more often.

HAZE

Another atmospheric phenomenon that disrupts air clarity and limits our visibility is haze. Unlike fog, which is composed of liquid or frozen water particles, haze is a condition in which the air's lower layer, closest to the surface, contains a high concentration of solid and dry particles that remain suspended for an extended duration. These can include mineral dust, ash and even pollen. Human activities can also contribute to the formation of haze. Large-scale particles, such as burning garbage, natural forest and bush fires, infuse the air with ash particles that can spread over extensive regions. Additionally, large construction sites, quarries and field plowing can generate localized haze.

SMOG

Smog is a combination of the words "smoke" and "fog", and it was coined to describe a state of extreme air pollution, mostly caused by human activity like burning fossil fuels or industrial chemical processes. While fog and haze describe a state in which the air is saturated with liquid or solid particles only, smog contains many gaseous components, which, when combined with solid and liquid particles, can confer gray, yellow or brown shades to the air. Although visually, haze and smog might appear quite similar, haze often covers large geographical expanses, whereas smog manifests more locally, appearing from afar as a low-hanging layer hovering over cities. Though the term smog includes the word fog, the presence of fog droplets isn't necessary for smog formation.

The main gases that constitute smog are nitrogen oxides, sulfur oxides and ozone. A significant component of smog is the soot itself, made up of different carbon compounds in a gaseous or solid state. These are released during the incomplete combustion of carbon-based fuels such as coal and oil. The source of the gases and particles forming smog are internal combustion engines in vehicles, carbon fuel-based power plants and even home heating stoves that utilize wood, coal or oil. As a result, urban areas, especially densely populated ones or those with cold winters, are typical hotspots for smog, posing a significant health risk in urban environments.

One of the physical processes that take place during the formation of smog is called photochemical smog: the reaction and decomposition of polluting carbon compounds by ultraviolet radiation from the sun that produces new

gases, which are often highly hazardous and reactive. For instance, the radiation might cause nitrogen oxides to bond with oxygen to produce the toxic and unstable ozone gas (O3). Ozone's instability is manifested in his rapid reaction with other gases in the smog, forming additional toxic compounds, such as peroxyacyl nitrate. Ozone also facilitates the conversion of sulfur and nitrogen oxides in smog to sulfuric and nitric acids, which attach to raindrops or mist droplets, resulting in acid rain or acid fog. This acidic precipitation poses threats to ecosystems, buildings and infrastructure.

TEMPERATURE INVERSION

A meteorological phenomenon that contributes to the formation of fog, haze and smog is temperature inversion in the lower atmospheric layer, called the troposphere. Typically, the air temperature in the troposphere decreases as the altitude increases. However, sometimes the opposite occurs: when the lowest air layer that is in contact with the surface is colder than the layer above it. Since colder air is denser than warm air, it does not tend to rise. This bottom air layer stays in place, allowing particles and gases to accumulate in high concentrations, without dispersing due to vertical air flow.

This is also why power plants that burn fossil fuels release smoke through very tall chimneys. Their role is to route particles above the inversion layer, so they do not accumulate near the ground and cause health hazards.

Smog accumulation beneath the inversion layer poses a significant problem in large urban areas that tend to form 'urban heat islands' around them, due to excessive absorption of sunlight relative to natural terrain. At night, when the sun is no longer heating the surface, the warm air layer surrounding the city may rise slightly, allowing colder air from the surroundings to penetrate beneath, creating an inversion. This phenomenon becomes even more severe in cities that are located within valleys, where cold air from the mountain peaks slides down during the night and gets trapped beneath the warm city air. Consequently, cities with similar topographical features, grapple with severe air pollution, putting their residents at an elevated risk of developing respiratory and other health problems that could lead to premature death.

These are the most prominent phenomena that affect atmospheric clarity. Some of them are side effects of processes beyond our control, such as sandstorms, natural forest fires or volcanic eruptions. However, some are caused, or significantly influenced by man-made air pollution. We can and should reduce these, not only to be able to enjoy our world's landscapes, but primarily for our health.

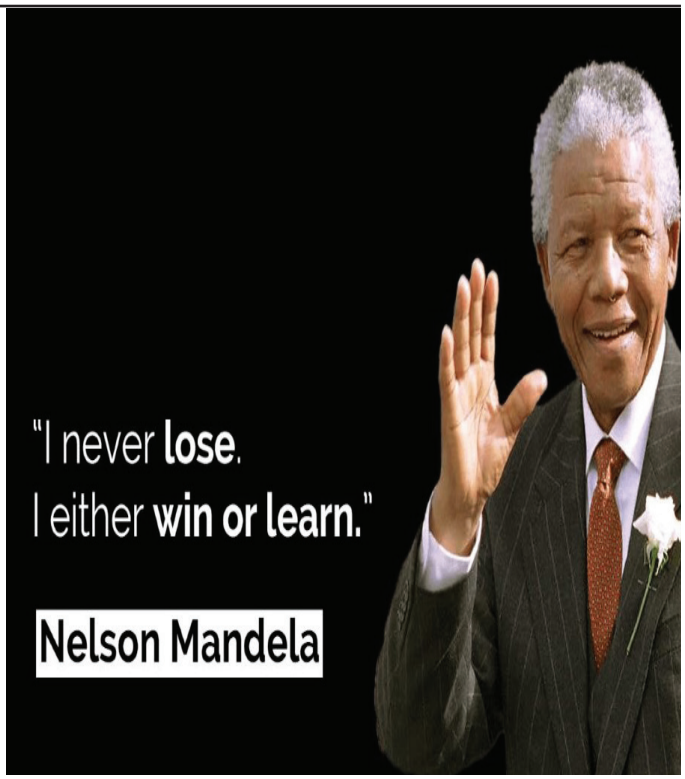
Centric Health

Centric Health is a multispecialty medical group comprised of many of the most outstanding medical professionals and medical groups in Bakersfield dedicated to providing the highest quality of medical care in a rapidly changing health care landscape. Centric Health was developed to enable physicians to do their best work and to assure access to high quality care for residents of our community. Centric Health includes a broad spectrum of medical specialties and services designed to meet the many needs of patients.

The Physicians and healthcare professionals at Centric Health Medical Offices offer an array of services ranging from Cardiology, Vascular, Primary Care, Endocrinology, Pulmonology and Diagnostic Imaging.

- **Central Cardiology Medical Center**
- **Preferred Family Care**
- **Sillect Medical Centers**
- **Kern Endocrine Center**
- **WF Baker MD and Associates**
- **Centric Primary Care**
- **Golden Valley Medical Associates**
- **Harjeet Singh, MD**
- **Susan Hall, MD**
- **Clinica Del Valle**
- **Golden State Hospitalists**
- **Centric Health Imaging**

True Happiness
comes not from
what you get
but from what
you give.



"I walked right past the bakery without stopping to check out the holiday goodies. Now *that's* a miracle on 34th Street!"

"You're getting too old to celebrate like you used to. It's time to say No-No-No instead of Ho-Ho-Ho!"