

STUCKY  
CHIROPRACTIC

# HEALTHY LIVING NEWSLETTER

It is the mission of Stucky Chiropractic Center to educate as many men, women, and children to the life and health enhancing benefits of chiropractic care and improve our world by having a positive influence on each individual we serve.

## Supplements of the Month: Congaplex, Immuplex & Vitamin C

### Congaplex

Congaplex contains essential vitamins and minerals that support the production and protection of immune cells, along with other nutrients to support healthy energy metabolism and provide antioxidant protection. The immune system is a complex network of organs, cells, and tissues that help defend against microscopic invaders. Since we are regularly exposed to environmental and lifestyle stressors, Congaplex provides the body with the best defense.

In a series of cell-culture experiments using immortalized T cells, Standard Process researchers showed that Congaplex affected signals produced by white blood cells. When a substance that provokes an immune response (antigen) is detected by T cells, these immune sentinels release cytokines that direct the action of the immune system. Cytokine production increased in the cells supplemented with Congaplex.

### Immuplex

Immuplex from Standard Process contains antioxidants, vitamins, minerals, and glandulars including Protomorphogen and Cytosol extracts to support the healthy functioning of the immune system. Our immune system is a complex network of organs, cells, and tissues that provide defense against physical stress. Specialized cells called lymphocytes and phagocytes are immune cells that recognize and destroy microscopic invaders. These, along with other parts of the immune system, help support our health. The constant pressure from environmental factors, poor eating habits, stress, and lack of sleep and exercise can compromise immune function. Immuplex contains several nutrients that are well known for their important roles in immune system health and function, and is designed to provide ongoing nourishment to the immune system.

### Vitamin C

Vitamin C is an essential micronutrient that has a multiplicity of vital roles throughout the human body. This vitamin must be consumed as part of the diet or through supplementation, as the body cannot produce it endogenously.

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## Vitamin C Continued...

Recent data suggests that as many as 20% of adults in the U.S. are vitamin C deficient, and as few as 10% consume adequate vitamin C on a daily basis.

Vitamin C has a vast range of biological roles in humans, working as a major antioxidant (electron donor). As such, vitamin C is crucial for supporting oxidative stress, energy production, and immune function. It is also necessary for synthesizing key neurotransmitters (especially norepinephrine and dopamine) and supporting healthy liver function.

Research is continually uncovering the many actions of vitamin C throughout the body. Findings thus far suggest that vitamin C is an integral micronutrient for neuronal differentiation and maturation, as studies have shown that supplemental vitamin C increases brain derived neurotrophic factor (BDNF)—a peptide that supports healthy cell function. Vitamin C also appears to promote healthy dopamine and norepinephrine levels by acting as a co-substrate.

When the body lacks vitamin C, the risk of a collagen-related disease called scurvy increases. Consuming adequate vitamin C, through diet and supplementation, can help protect against scurvy by promoting healthy collagen synthesis.

oxidative stress and inflammation. One of the notable compounds in red bell peppers is quercetin, which is known to have a wide range of health benefits. Quercetin has been shown to help reduce inflammation, alleviate pain, lower blood pressure and improve learning and memory.

Although vitamin C is often hailed for its powerful immune-boosting properties, it has a protective effect against heart disease and early death, too. Vitamin C is also heavily involved in your nervous system. It supports your neurons, modulates the transmission of nerve impulses and helps your body make catecholamines or the hormones dopamine, norepinephrine and epinephrine that help control your stress levels.

<https://articles.mercola.com/sites/articles/archive/2020/08/08/vitamin-c-in-red-bell-peppers.aspx>



## A Veggie That's a Fruit, With More Vitamin C Than an Orange

### Vitamin C in Red Bell Peppers

Although you might immediately think of oranges or orange juice when you hear the term "vitamin C," bell peppers — specifically sweet red bell peppers — are a far better source.

One cup of sliced raw red bell pepper contains 117 milligrams (mg) of vitamin C, which actually exceeds the current RDA for the entire day. For comparison, the same amount of green bell peppers contains around 74 mg. According to a comparative study in the September 2012 issue of the Journal of the Science of Food and Agriculture, those numbers increase even more if you choose organic bell peppers.

The researchers analyzed the amounts of bioactive compounds in organically grown bell peppers and conventionally grown bell peppers and found that the organically grown peppers contained significantly more vitamin C and higher amounts of carotenoids, like beta carotene, phenolic acids and flavonoids, such as quercetin.

### Health Benefits of Red Bell Peppers

Many of the health benefits of red bell peppers can be attributed to the combination of bioactive compounds found within them. A single red bell pepper contains 30 different antioxidants, making them one of the most nutrient-dense fruits you can eat.

Antioxidants have been shown to help fight heart disease, prevent cancer, protect against liver disease and combat



### BREAKTHROUGH WEIGHT LOSS PROGRAM

- Transform to the New, Healthier You
- Genetic Testing for Accurate & Individual Plans!
- Fat Burning, Muscle Sparing



### Ask Your Doctor

- > Science Based Program
- > Doctor Supervised
- > No Shakes, Bars or Boxed Foods
- > Whole, Real Food

Results may vary. See clinic for details.



### Dad Joke Corner

What do you call a fake noodle?

An impasta!





# What Are the Effects of Masking Facial Expressions?



## Decoding Facial Actions Helps Categorize Emotion

Masks have removed a crucial way in which people use visual cues to communicate and understand each other. Smiles, cheek twitches and lip movements are all lost under a mask. These visual perceptions of expression are part of how people recognize and understand communication.

In a paper published in *Current Opinions in Psychology*, one professor from The Ohio State University hypothesized that to interpret emotion, the visual system, including the eyes and brain, attempts to identify muscle activation in the face. Based on computational, behavioral and imaging evidence, he believes humans are able to effortlessly infer an emotional state by reading facial expressions. This is different from the categorical model that proposes there are six distinct and universal emotions that are communicated across cultures. These are happiness, anger, disgust, sadness, surprise and fear.

The second theory is related to a dimensional model that suggests there are varying dimensions across emotions that are not distinct. Researchers have found evidence that supports the use of more than one way to categorize expression. While this may be highly interesting to psychological researchers, what does it mean in terms of our ability to communicate, when we can't see most facial expressions?

When adults were tested, they did not have to acknowledge they had seen a face for their brain to recognize the expression. While this is a good indication of how quickly the visual system communicates with the brain, when facial expressions are not fully visible, this recognition is hampered.

Rebecca Brewer from the Royal Holloway University of London points out that humans process a person's whole face rather than paying attention to a singular feature, such as the eyes, nose or mouth. "When we cannot see the whole face, such holistic processing is disrupted," she says. Children and adults learn to interpret information from the whole face; expressions on others' faces, even furrowed brows, are used in several cognitive processes.

## Still Face Experiment Demonstrates Early Facial Recognition

Children are also experiencing distress from adults wearing masks. The "Still Face" experiment, which was first performed in 1975 by Edward Tronick, Ph.D., who continues to conduct research on how a mother's stressful behavior may affect the emotional development of infants and children. The study may be one of the most often-cited in developmental psychology. Further investigations into infants' abilities to differentiate emotional expressions have revealed that within the first six months, babies learn to recognize emotion and distinguish physical characteristics associated with those emotions.

In one study, scientists found that babies spend more time looking at the mouth of an angry face just after hearing a happy voice. The researchers believe this is a reaction to hearing something different from what they're seeing and that it may demonstrate the ability at an early age to understand emotional information based on what is heard and seen.

<https://articles.mercola.com/sites/articles/archive/2020/08/15/what-are-the-effects-of-masking-facial-expressions.aspx>

## Employee Spotlight

### Olivia

Olivia is a chiropractic assistant at Stucky Chiropractic Center. She has worked here for almost a year.

Olivia is from Hutchinson, MN. She enjoys cooking, hot yoga classes, traveling, going to coffee shops, shopping, and spending time with friends.

Olivia is attending University of Wisconsin- Eau Claire and is majoring in exercise science, pre-chiropractic.

A fun fact about Olivia is that she danced for 16 years and now teaches barre classes at UWEC!



### Sarah

Sarah is a chiropractic assistant at Stucky Chiropractic Center. She is new to Stucky and just joined the team in July!

Sarah is from Duluth, MN. Her hobbies include running, hiking, any activity outdoors, spending time with her dog, and reading!

Sarah is attending University of Wisconsin- Eau Claire and is majoring in biology with 2 minors in chemistry and preprofessional health. She is on the pre-physician's assistant route with her education.





## Overloading Backpacks Pose a Painful Burden for Children

Scientific research reveals an alarming danger associated with improper childhood backpack use. This research stands from an increasing number of reports in childhood back pain in recent decades. By the end of their teen years close to 60% of youth experience at least one low back pain episode. New research indicates that this may be due, at least in part, to the improper use of backpacks on young spines. Watch children in any school yard struggle to walk while bent sideways under the weight of an overloaded backpack on one shoulder. You will quickly realize the potential danger of this common place item.

## Backpack Attacks

How exactly does carrying a backpack affect the spine? Common sense tells us that a load distributed improperly or unevenly day after day indeed causes stress to a growing spinal column. The old adage as a twig bends so grows the tree comes to mind. This is a growing concern about the improper use of back packs and relatively scarce amount of instructional and prevention information available to young people. It is not the backpacks fault that the child has not been given the guidelines.

## Check the Numbers

The Consumer Product Safety Commission (CPSC) estimates that 6,512 emergency visits result from injuries related to backpacks. The CPSC also reports that backpack related injuries are up 256% since 1996. Do this "heavy" math... the average child's backpack weighs 12 pounds times 10 lifts a day equals 120 pounds lifted per day. 120 pounds per day times 180 days per school year equals 21,600 pounds per year. That is nearly 11 tons or equivalent to 6 full size automobiles.

## Getting Out of Line

Hauling a heavy backpack over one shoulder everyday may cause serious misalignments. These postural imbalances often trigger a condition called vertebral subluxations. Vertebral subluxations are dysfunctional areas of the spine where movement is restricted or bones are out of alignment. This disorder predisposes patients to a number of problems such as neck pain, back pain, headaches, and osteoarthritis and disc disease. In recent scientific experiments, carrying a backpack alters the mobility of spinal bones and can lead to restrictive movements, a risk factor for pain. Yet another study uses MRI imaging to examine the effects of backpacks on the intervertebral discs of the spine, the fluid filled pillows between the spinal bones. According to the report, backpacks alter the fluid content of these discs, a risk factor for disc herniation and osteoarthritis. Students that carry backpacks weighing 25% of their body weight may have balance problems while performing normal activities such as climbing stairs and opening doors which in turn increase their risks of falls. In contrast, student carrying a pack that weighs 15% of their body weight maintain their balance moderately well. Those carrying 5% of their body weight were most effective in maintaining their balance.

## Backpack Safety Tips

1. Make sure that your child's backpack weighs no more than 10% of body weight. Heavier backpacks will cause your child to bend forward in an attempt to support the weight on his or her back rather than the shoulders by the straps.
2. Backpacks should never hang lower than 4 inches below the waistline.
3. A pack with individual compartments helps in positioning the contents most effectively.
4. Bigger is not necessarily better. The more room there is in the backpack, the more your child will carry resulting in a heavier backpack.
5. Encourage your child to wear both shoulder straps. Lugging the backpack around using one strap can cause disproportionate weight shifts leading to neck and muscle spasms as well as low back pain.
6. Wide, padded straps are important. Non-padded straps are not only uncomfortable but they dig into your child's shoulders.
7. Shoulder straps should be adjustable so the pack can be fitted to your child's body.
8. If the backpack is still too heavy, talk to your child's teacher and ask if your child can leave the heaviest book at school or bring home only the lighter handouts or workbooks when possible.

Finally, if you already started to notice the ill affects of improper backpack use, a visit to your local chiropractor may be in order. Identifying these problems early will go a long way in correcting the damage that has already been done. If not dealt with appropriately, this will surely lead to further problems in the future that could have been avoided. Take action early. Your kids will be healthier.